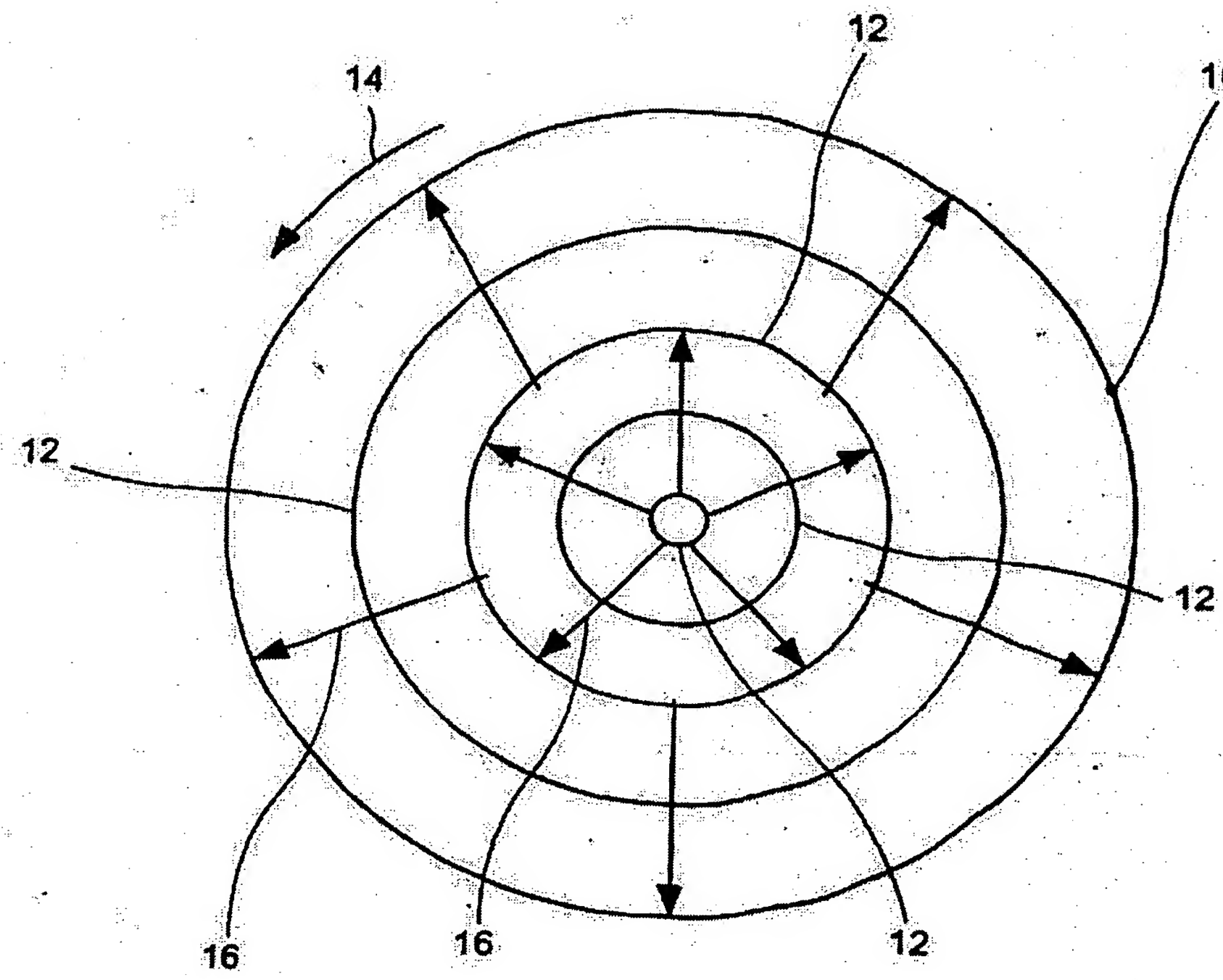

FIG. 1
(Prior Art)

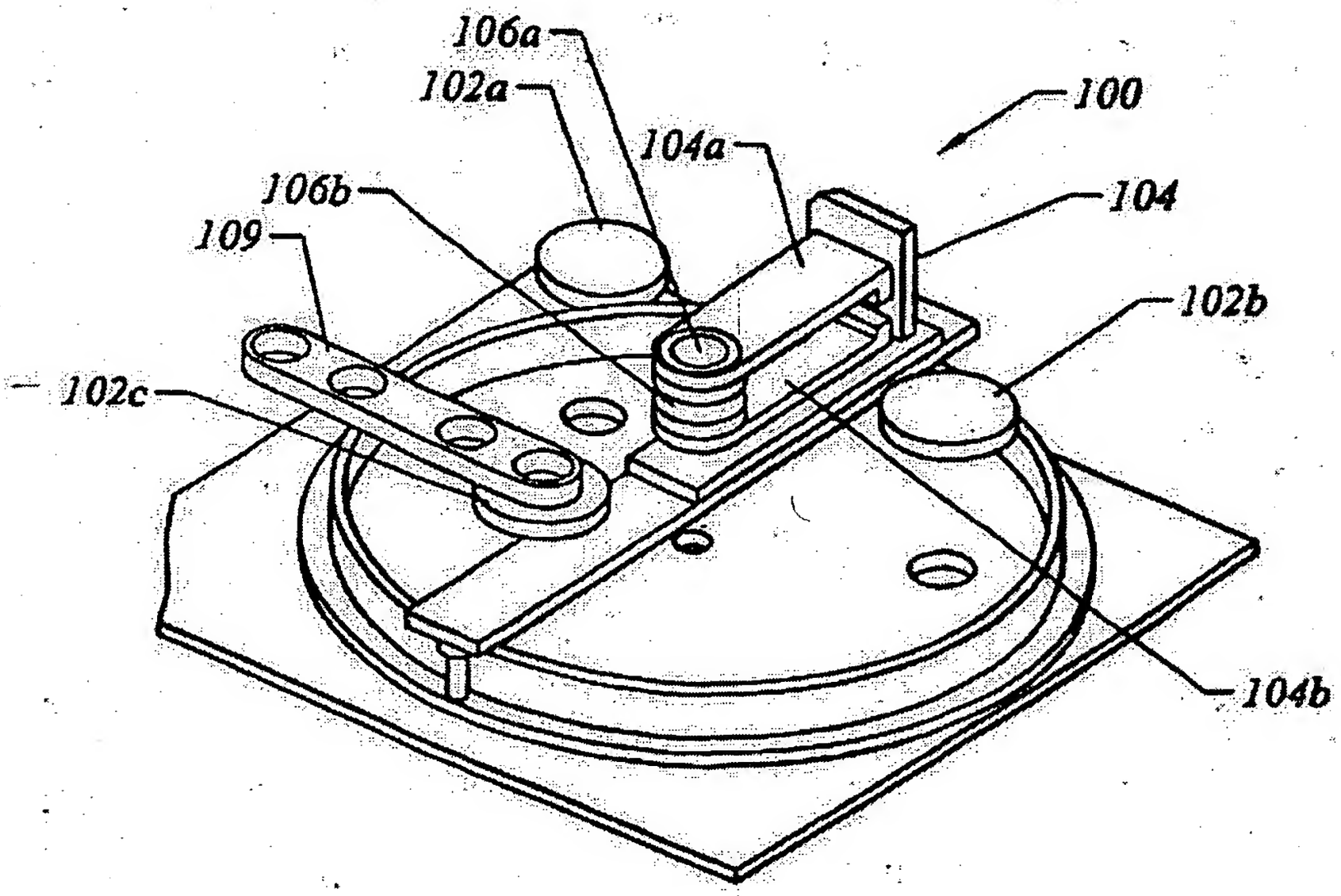
106a
102a
100
104a
106b
104
109
102b
102c
104b

FIG. 2A

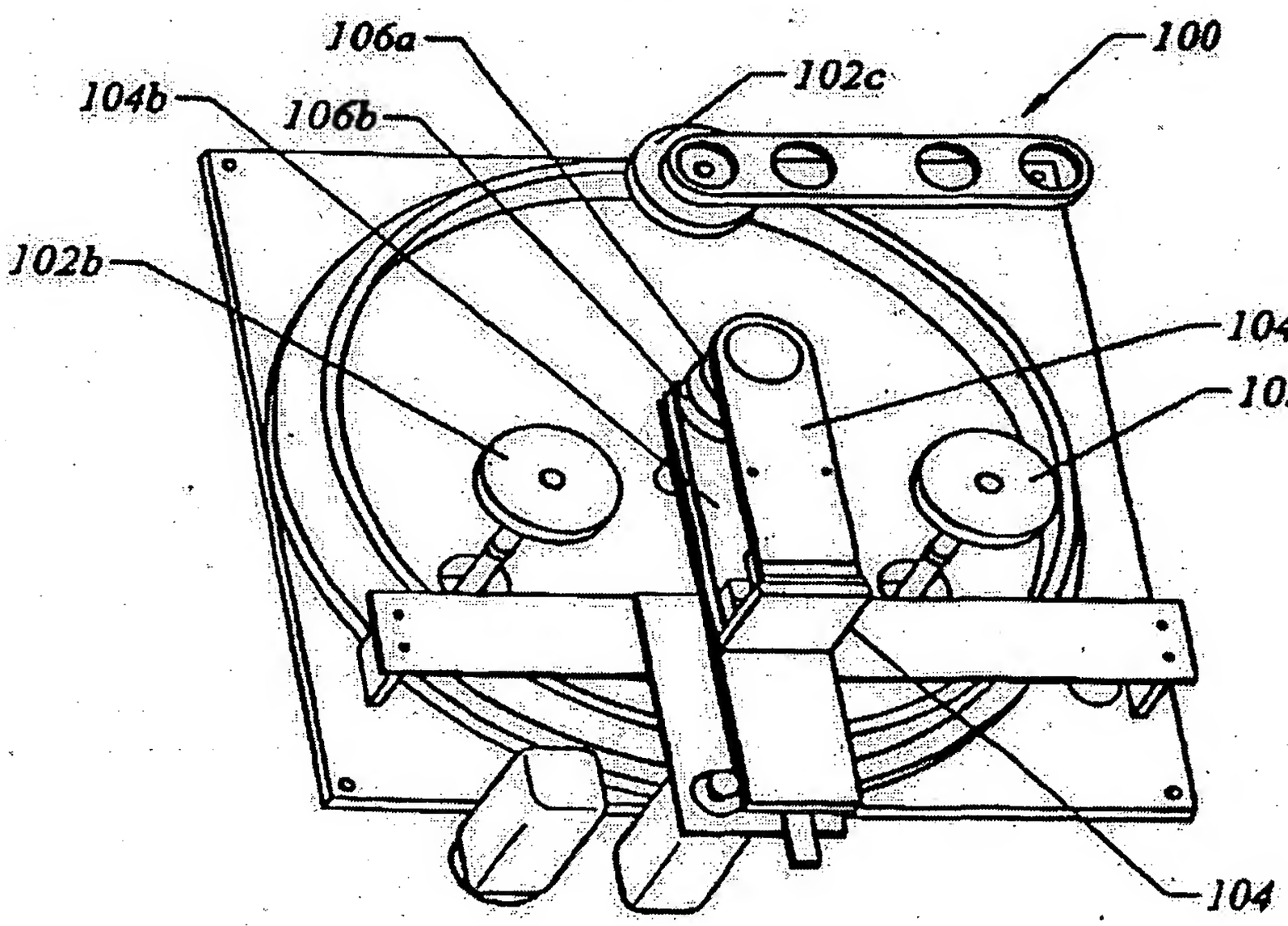
106a
100
102c
104b
106b
102b
104a
102a
104

FIG. 2B

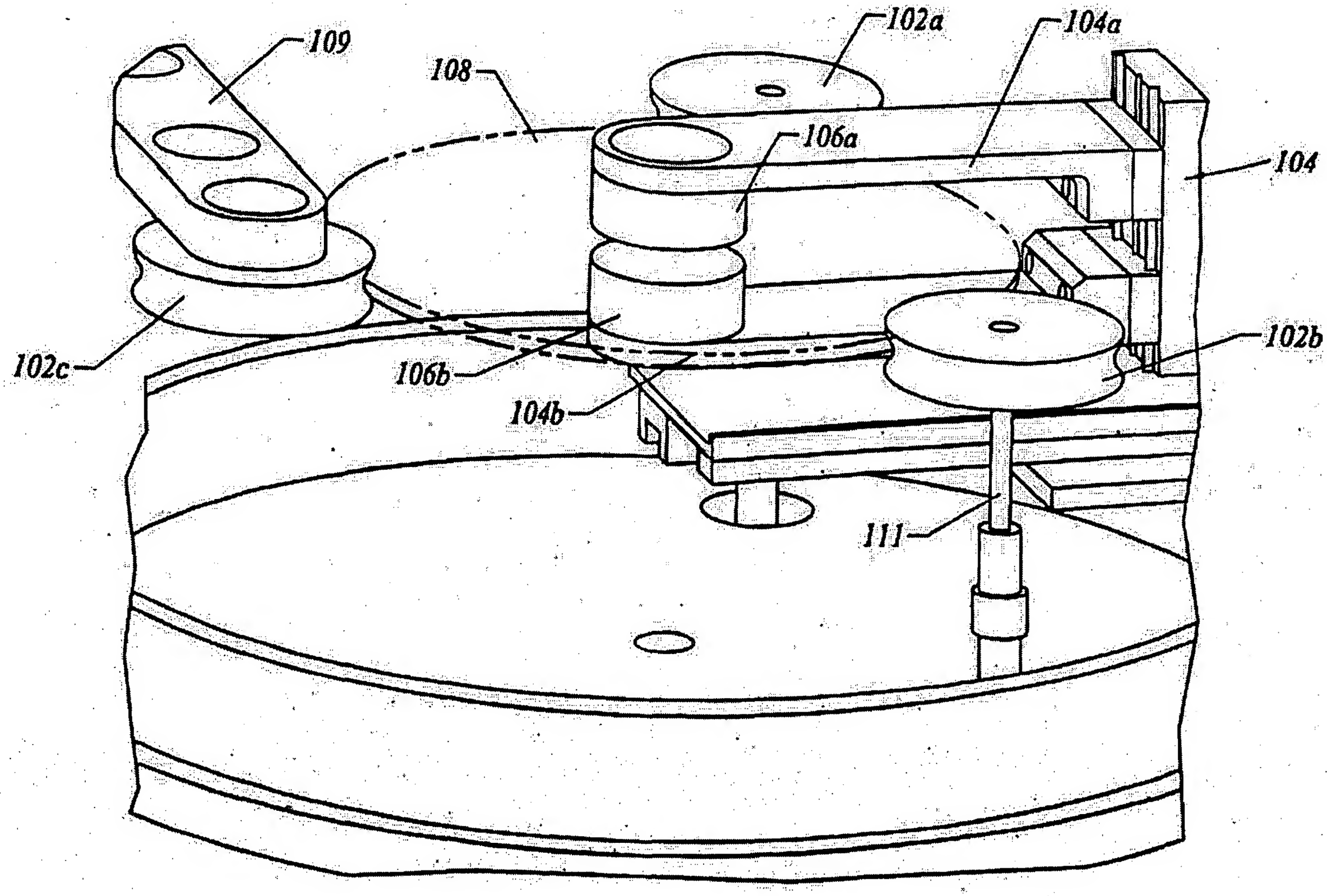

FIG. 2C

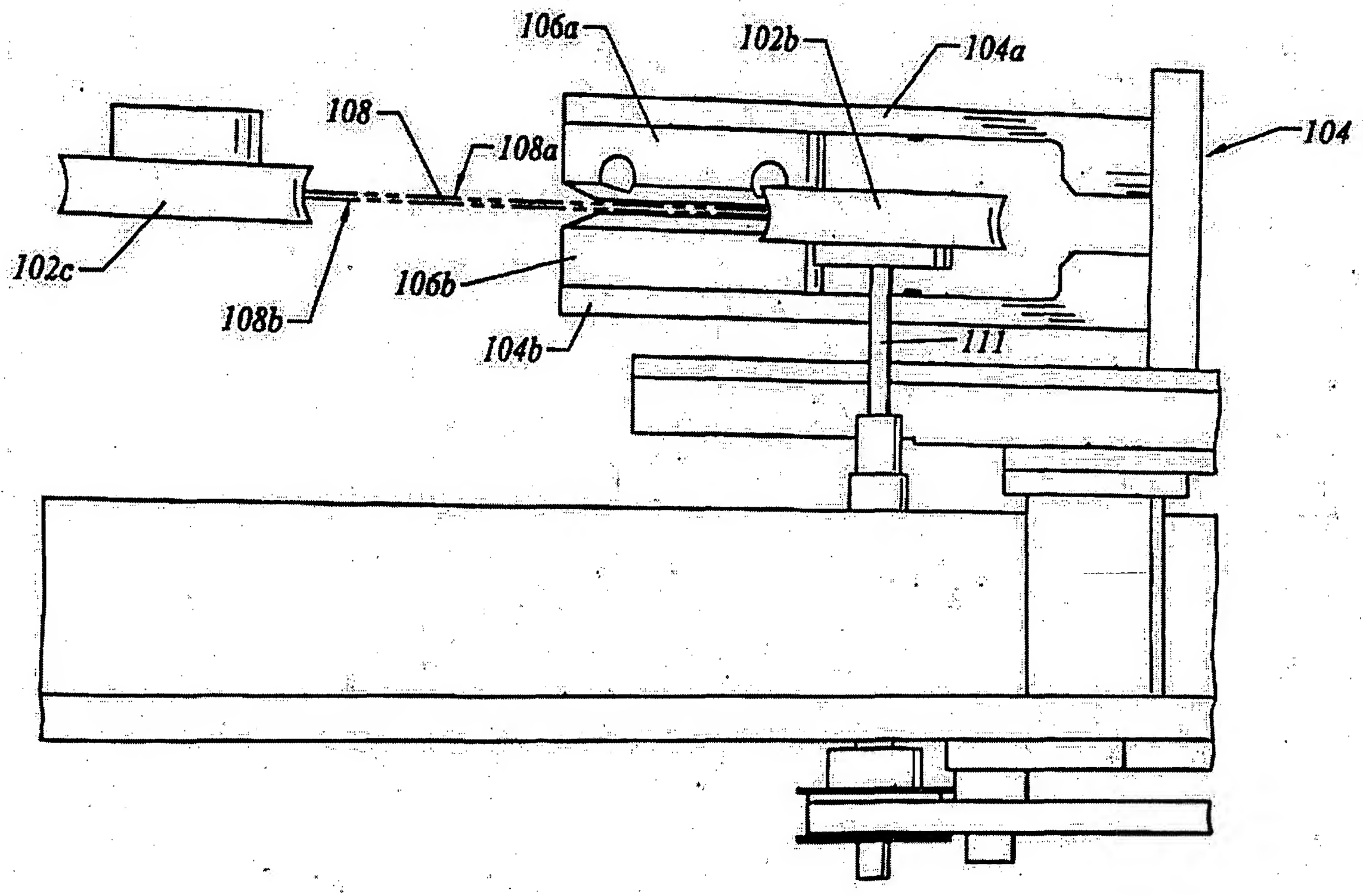

FIG. 2D

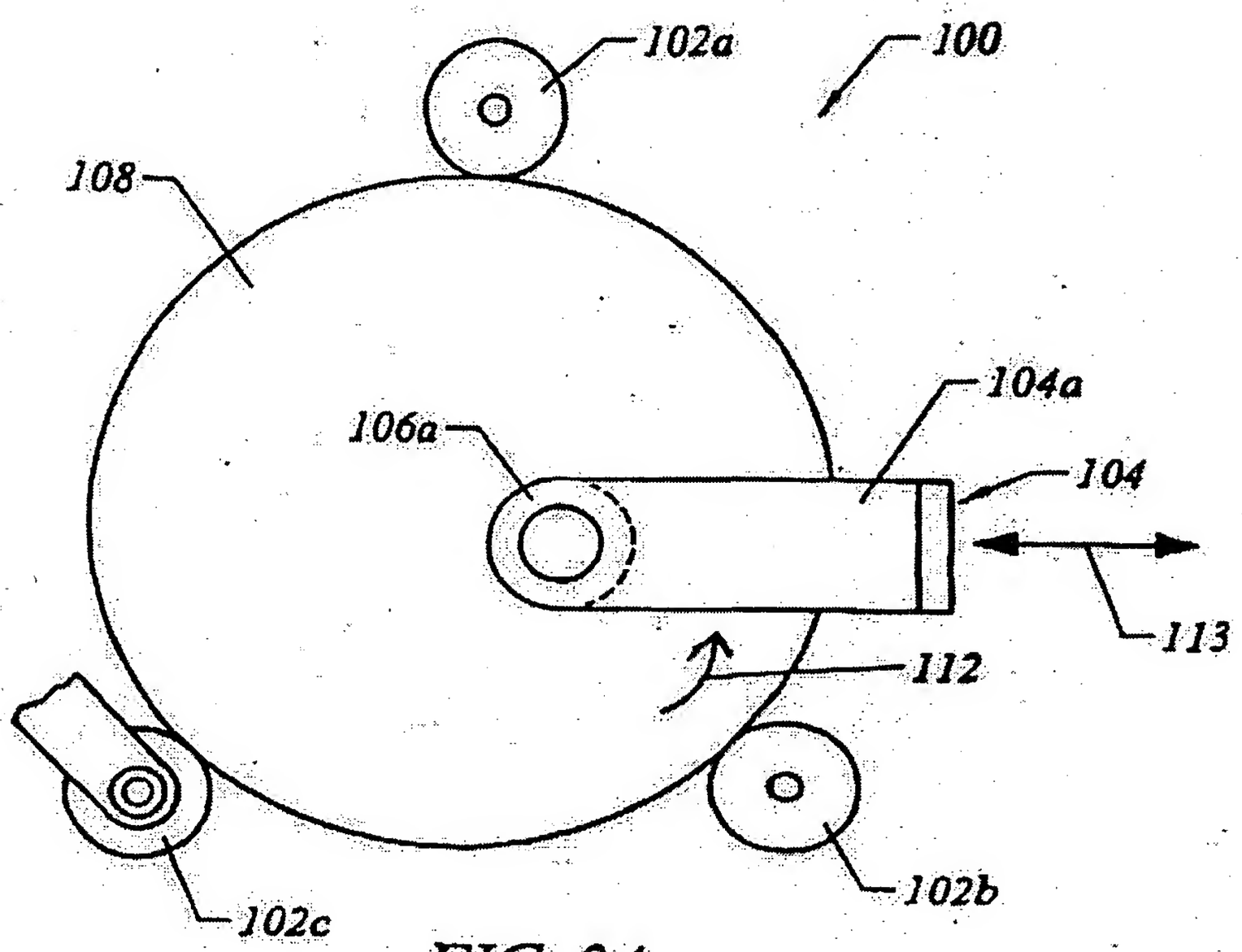
102a
100
108
104a
106a
104
113
112
102b
102c

FIG. 3A

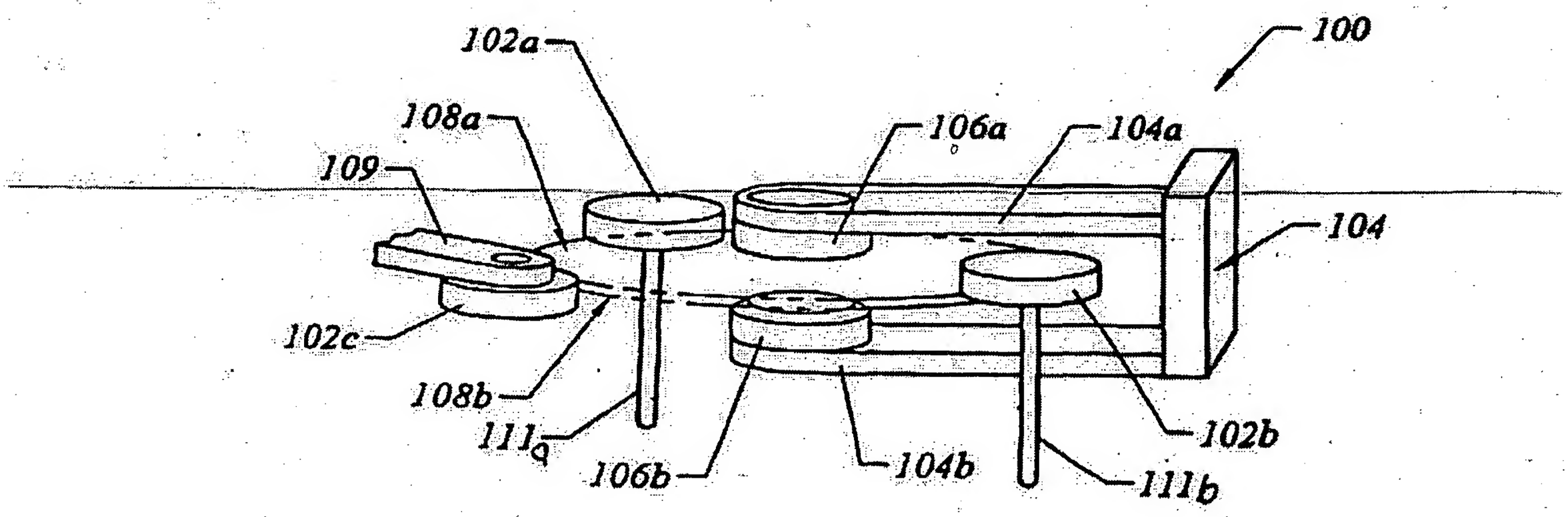
102a
100
108a
106a
104a
109
104
102c
108b
111a
106b
104b
111b
102b

FIG. 3B

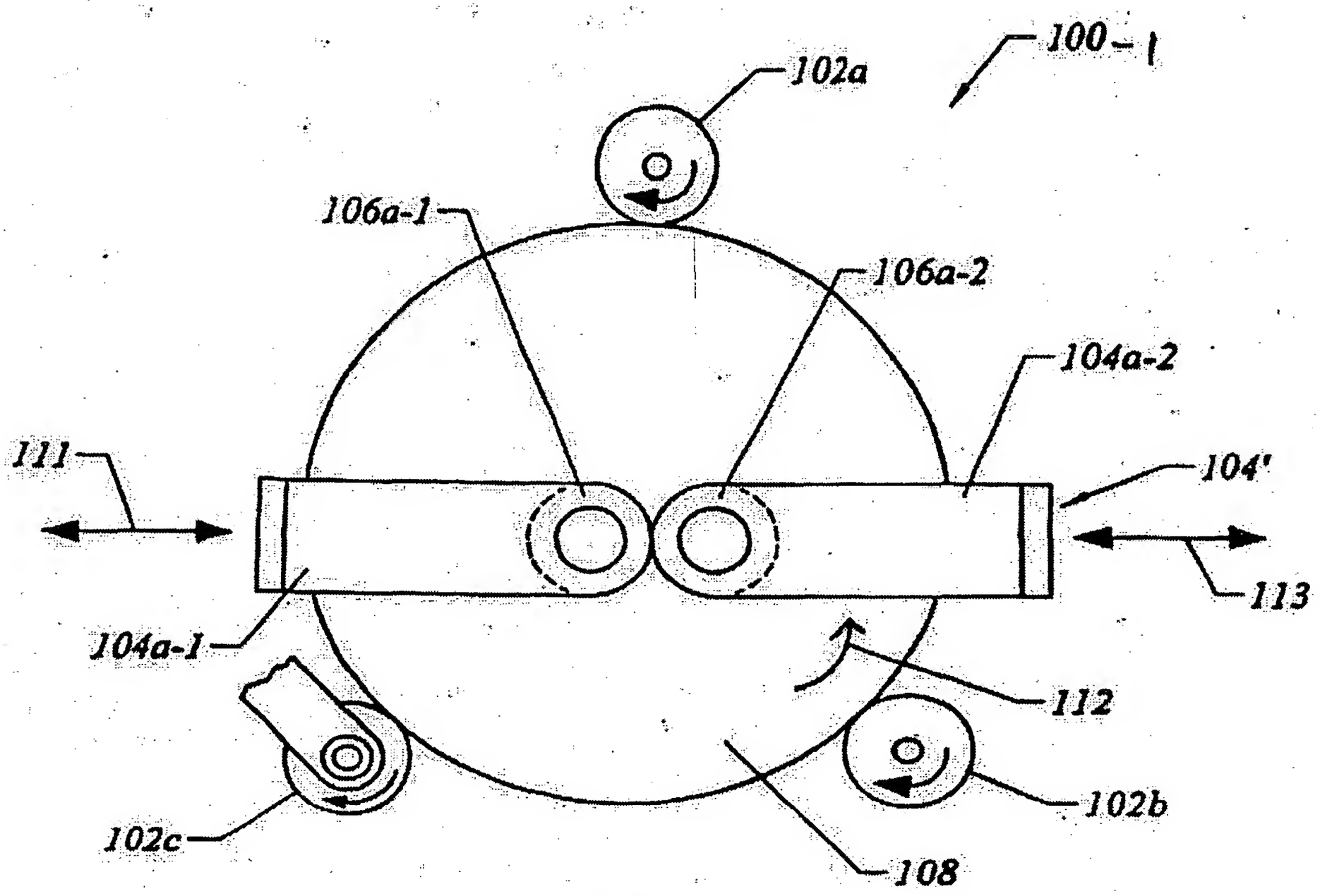
100-1
102a
106a-1
106a-2
104a-2
111
104'
113
104a-1
112
102c
102b
108

FIG. 4A

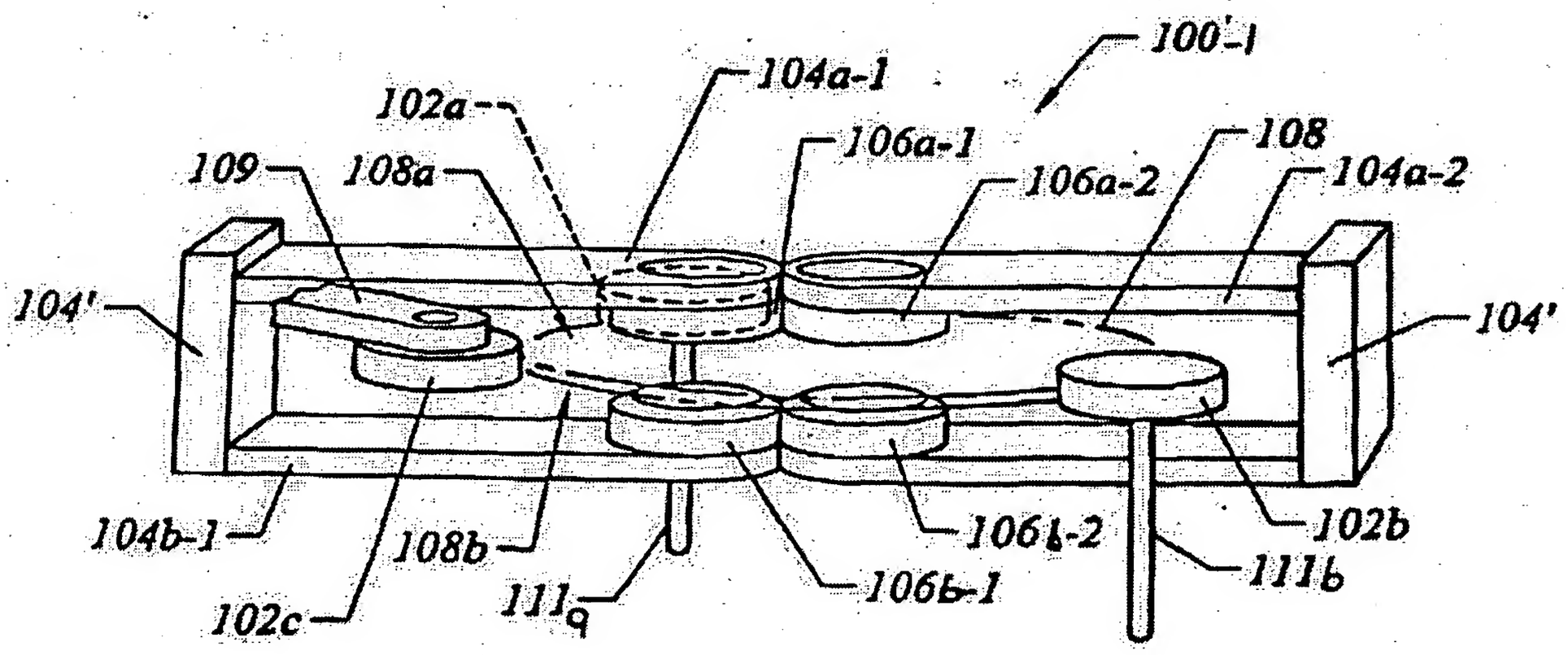
100'-1
104a-1
102a
106a-1
108
109
108a
106a-2
104a-2
104'
104'
104b-1
108b
106b-2
102b
102c
111q
106b-1
111b

FIG. 4B

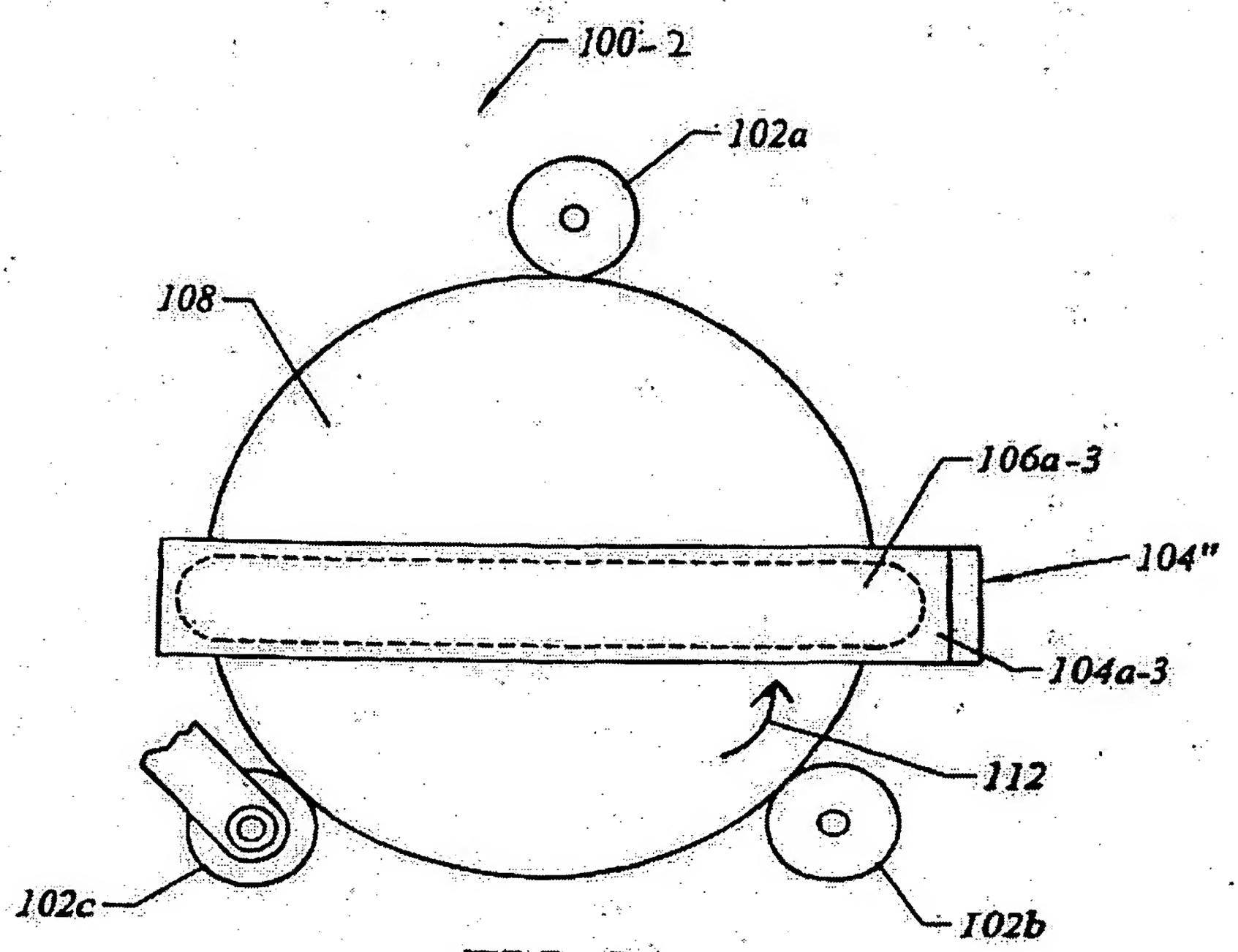
100'-2
102a
108
106a-3
104"
104a-3
112
102c
102b

FIG. 5A

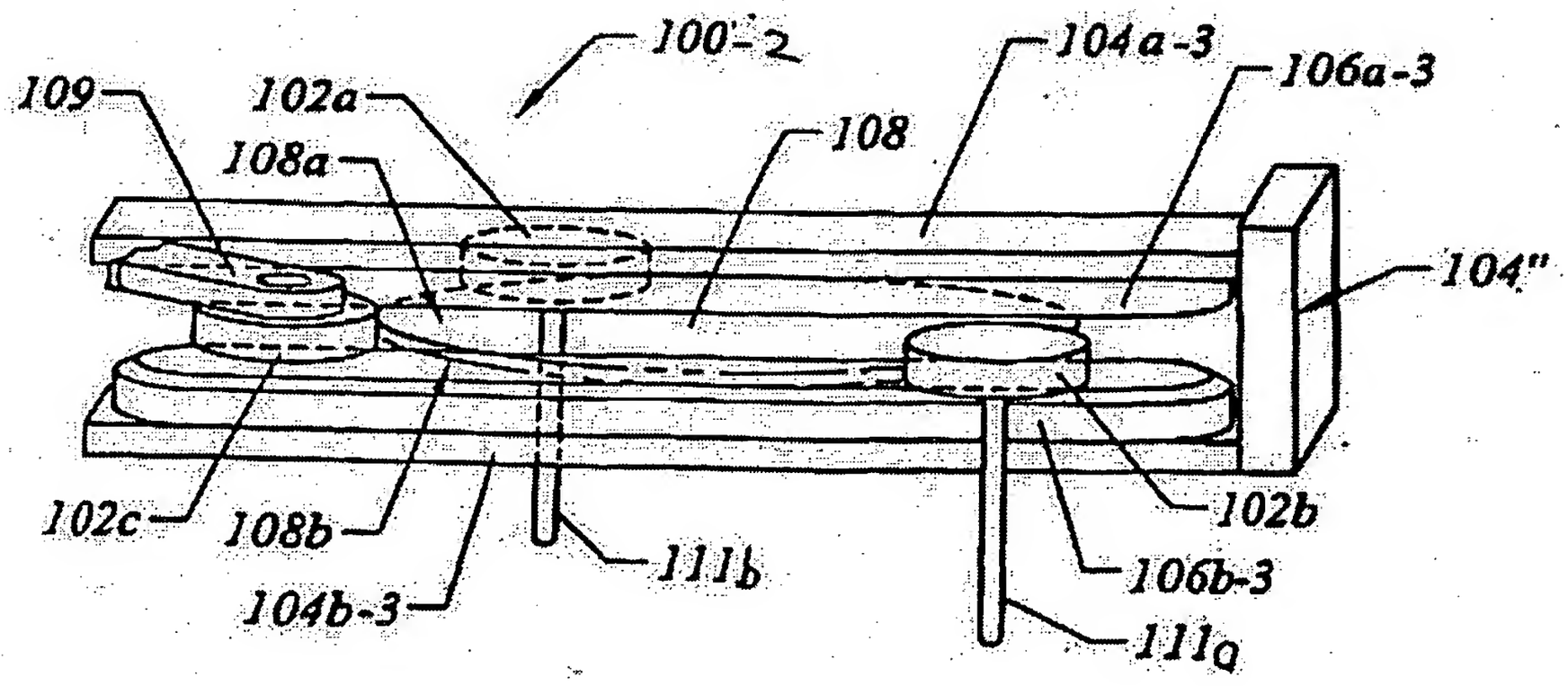
100'-2
104a-3
106a-3
109
102a
108
108a
104"
102c
108b
102b
111b
106b-3
104b-3
111a

FIG. 5B

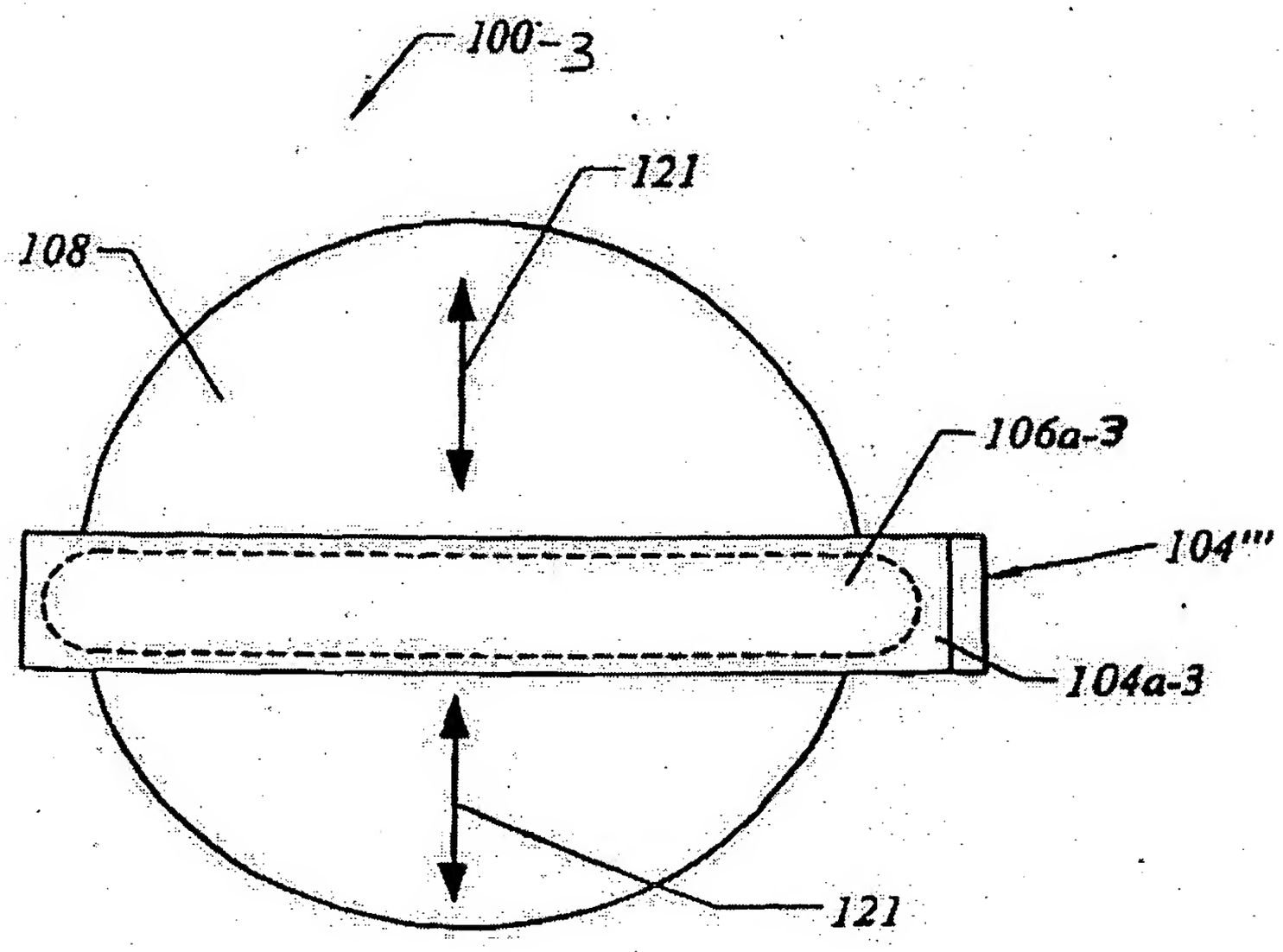
100-3
121
108
106a-3
104'''
104a-3
121

FIG. 5C

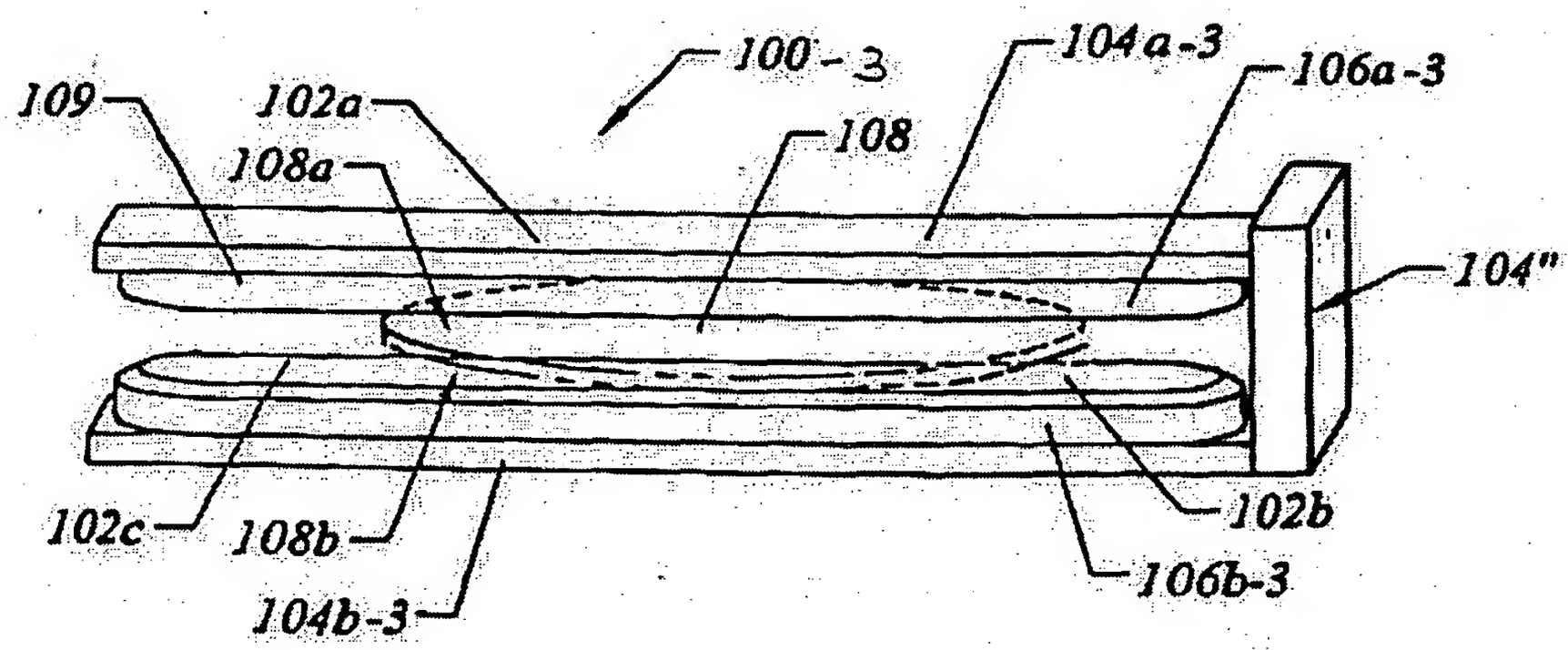
100-3
104a-3
106a-3
109
102a
108
108a
104"
102c
108b
104b-3
102b
106b-3

FIG. 5D

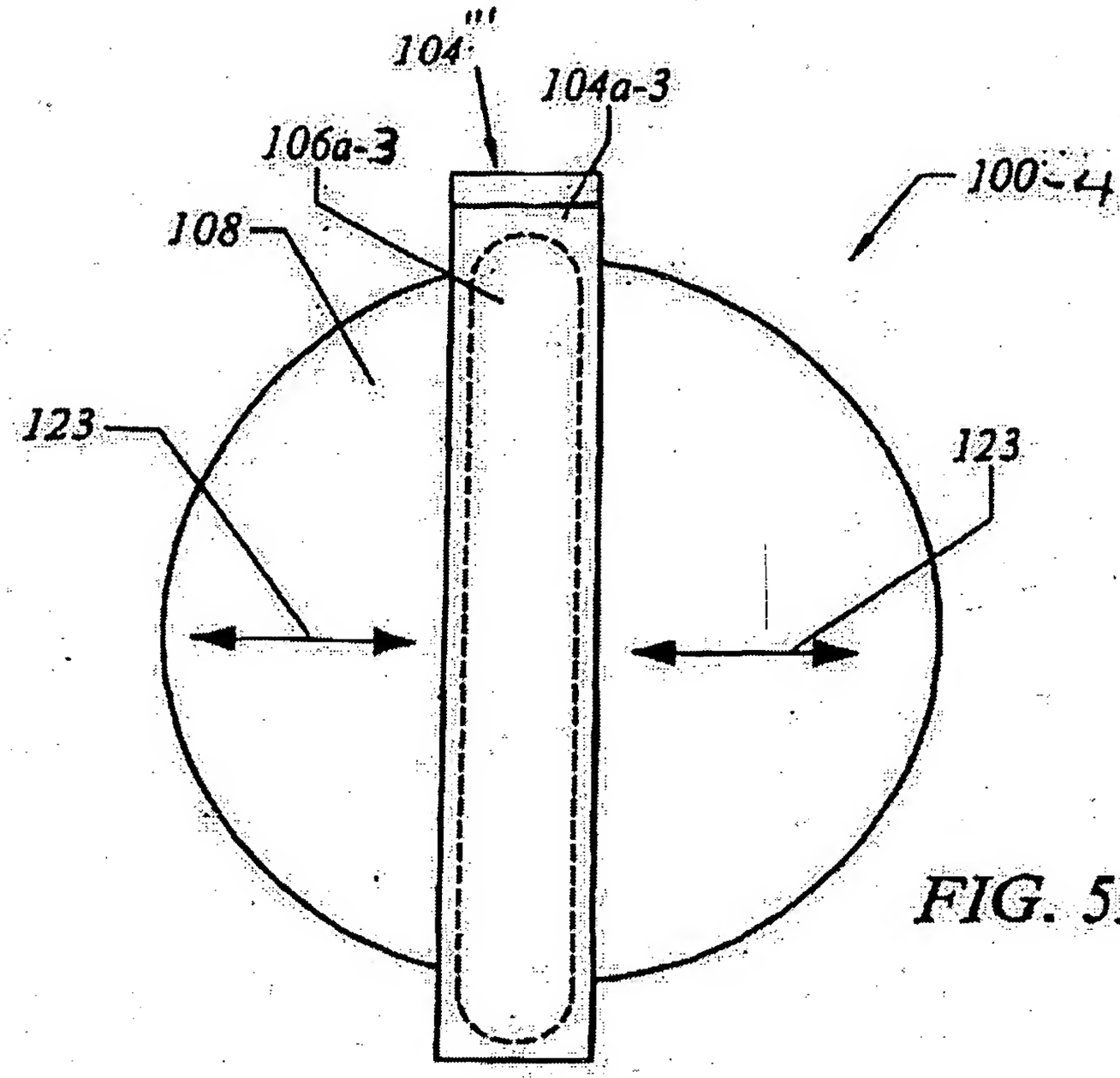
104'''
104a-3
106a-3
100-4
108
123
123

FIG. 5E

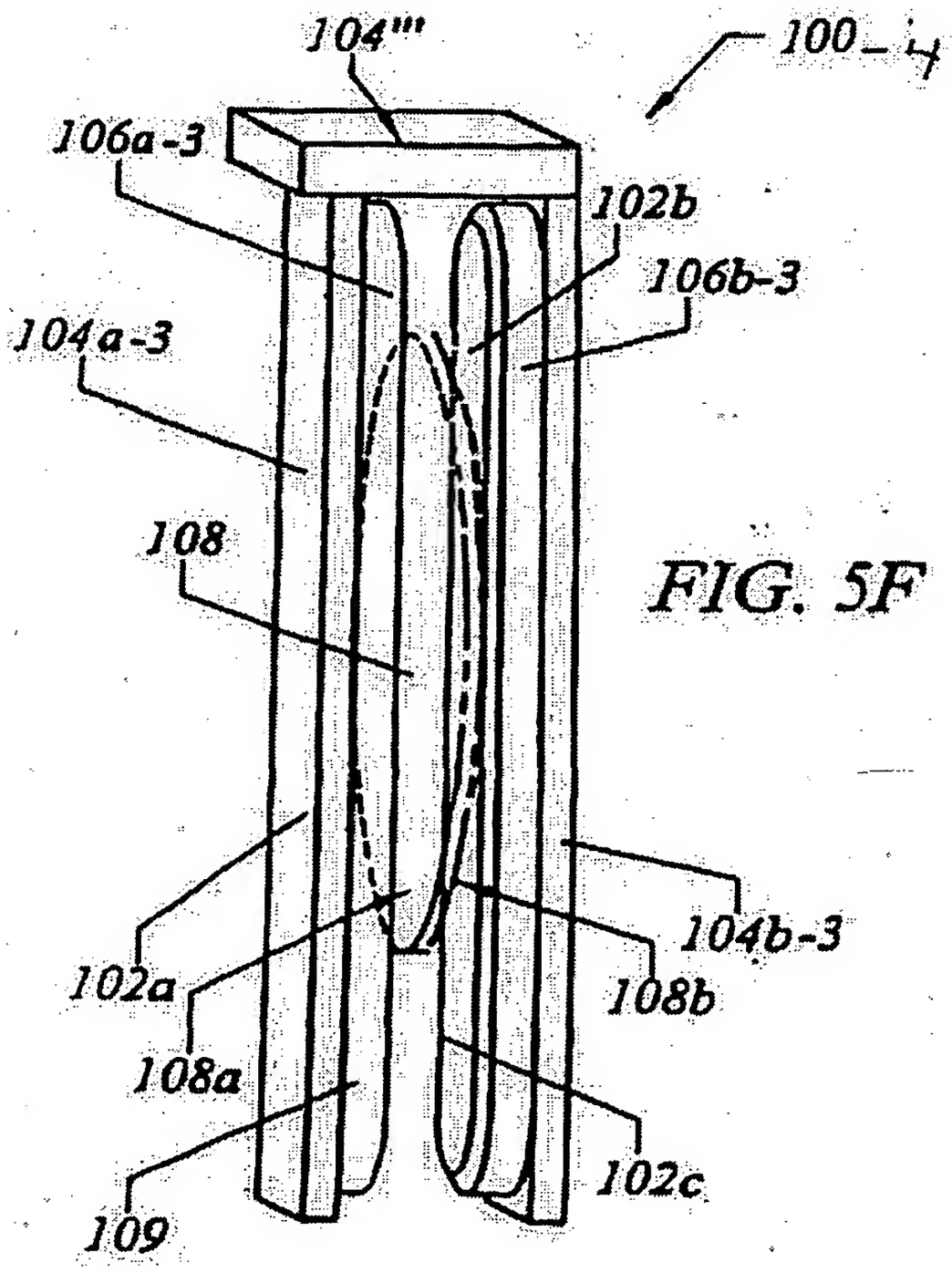
104'''
100-4
106a-3
102b
106b-3
104a-3
108
104b-3
102a
108b
108a
102c
109

FIG. 5F

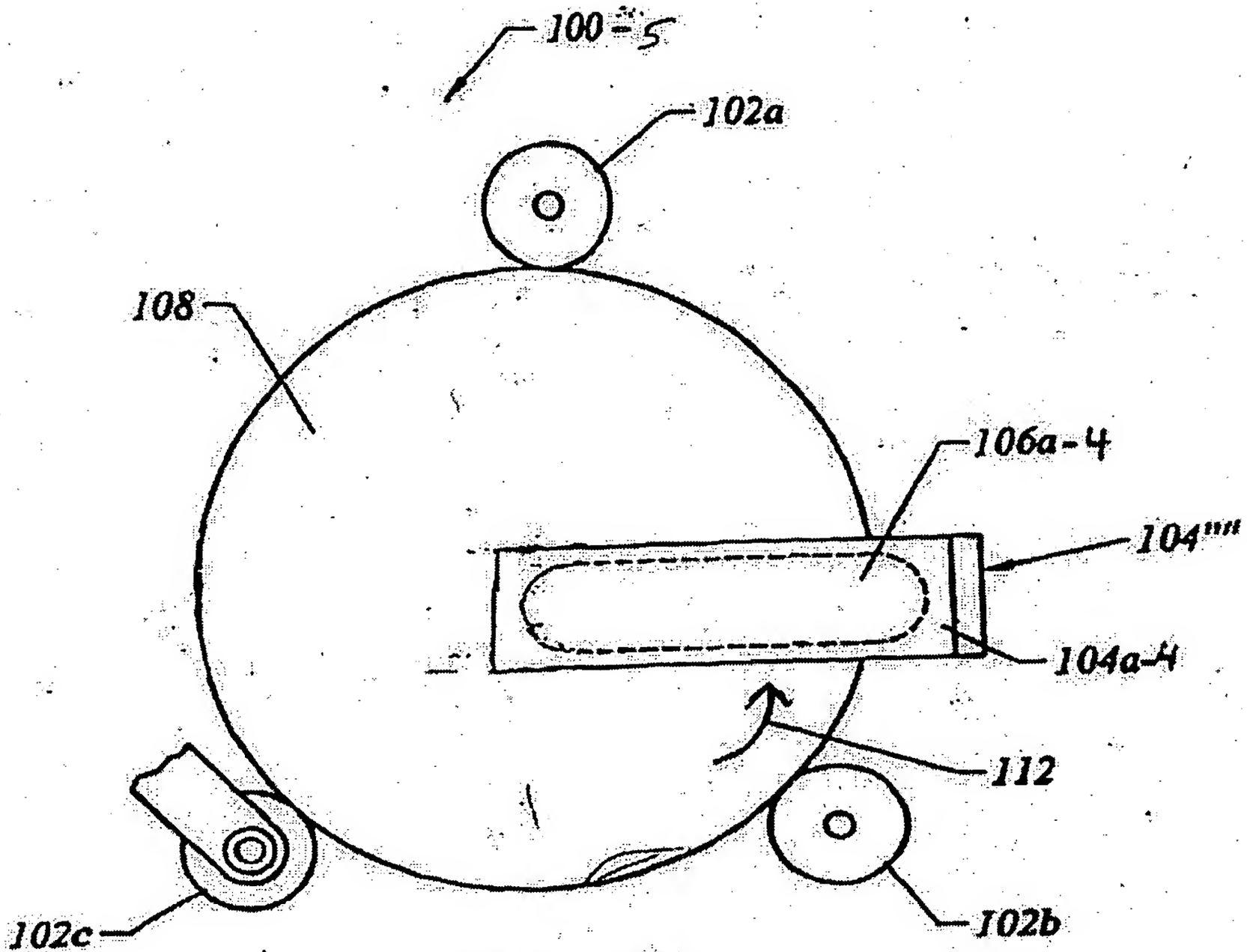
100-5
102a
108
106a-4
104'''
104a-4
112
102b
102c

FIG. 5G

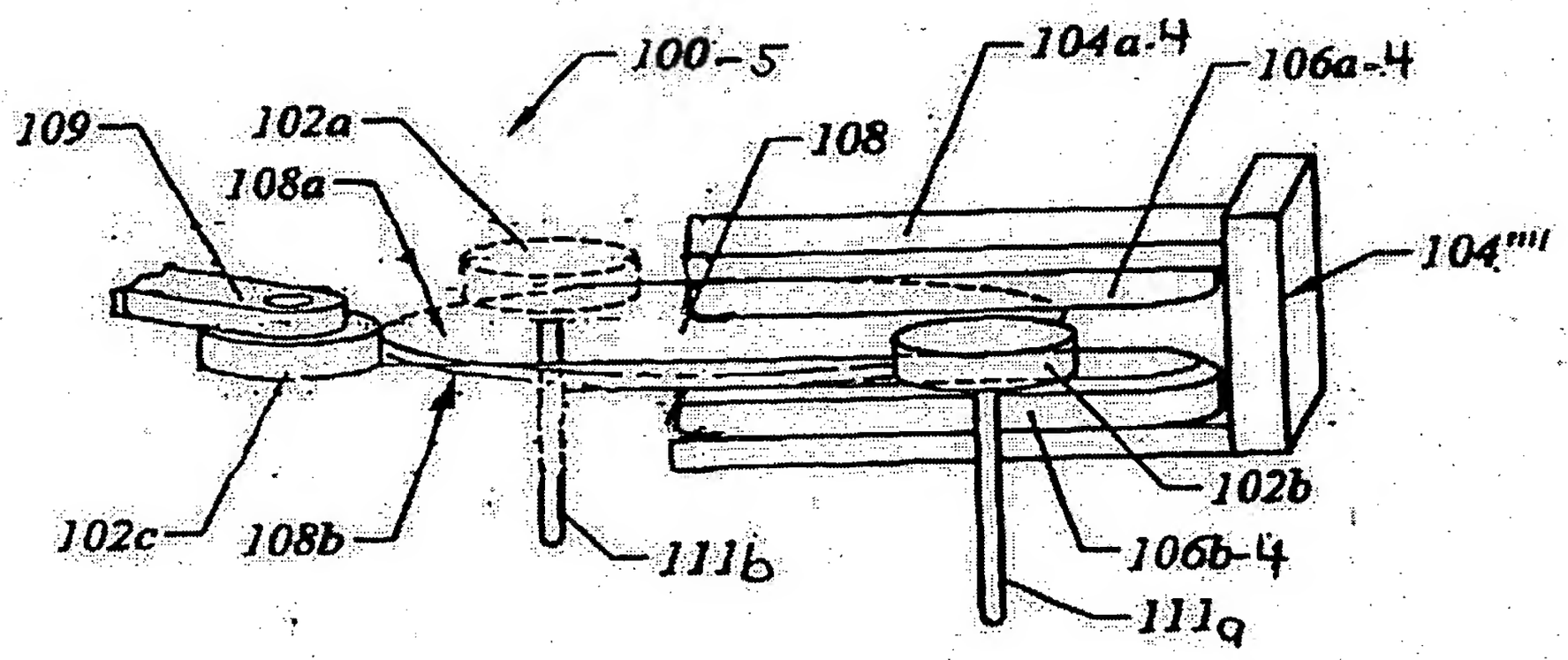
100-5
104a-4
106a-4
109
102a
108
108a
104'''
102b
102c
108b
111b
106b-4
111a

FIG. 5H

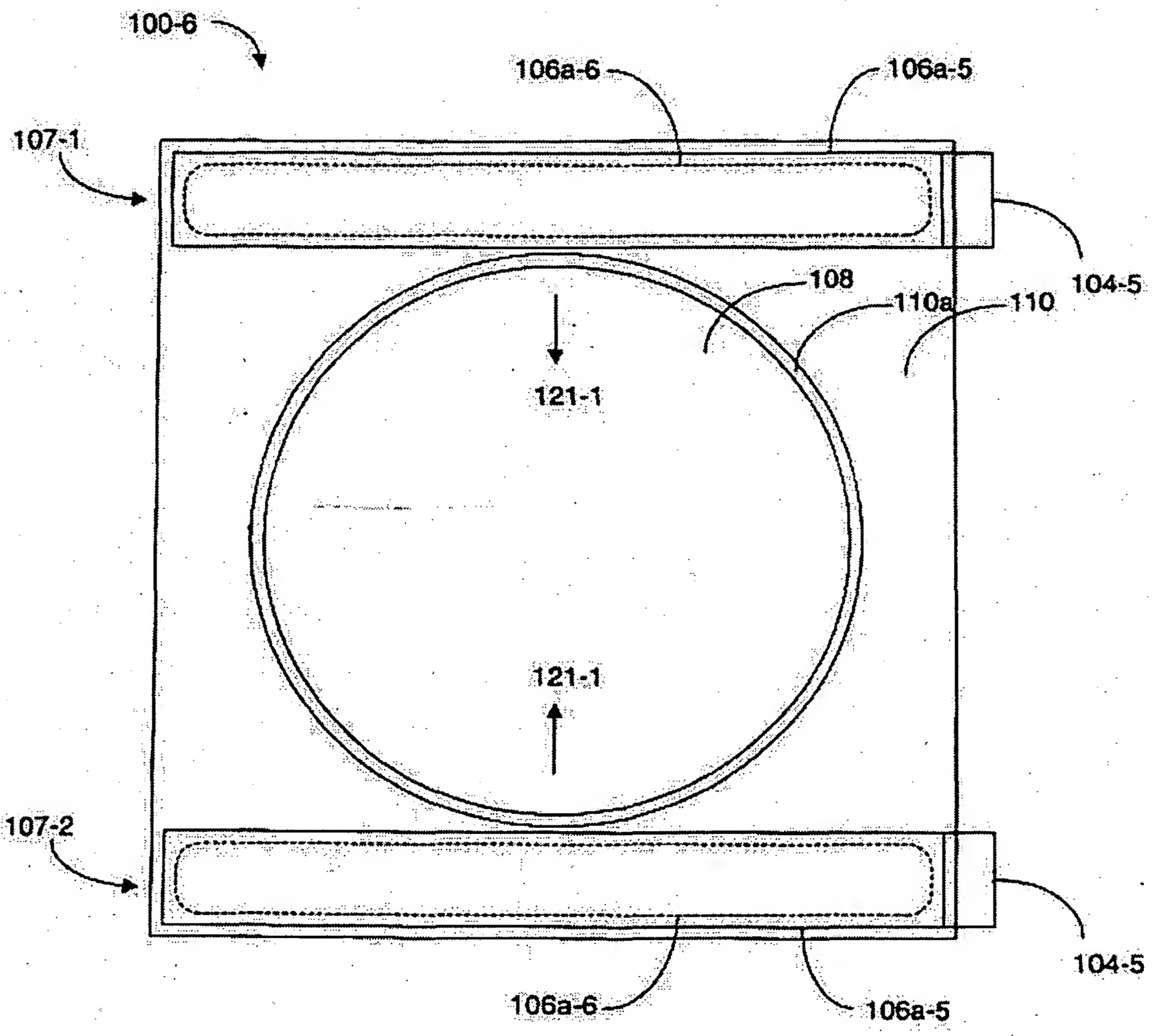
100-6
106a-6
106a-5
107-1
104-5
108
110a
110
121-1
121-1
107-2
104-5
106a-6
106a-5

FIGURE 5i

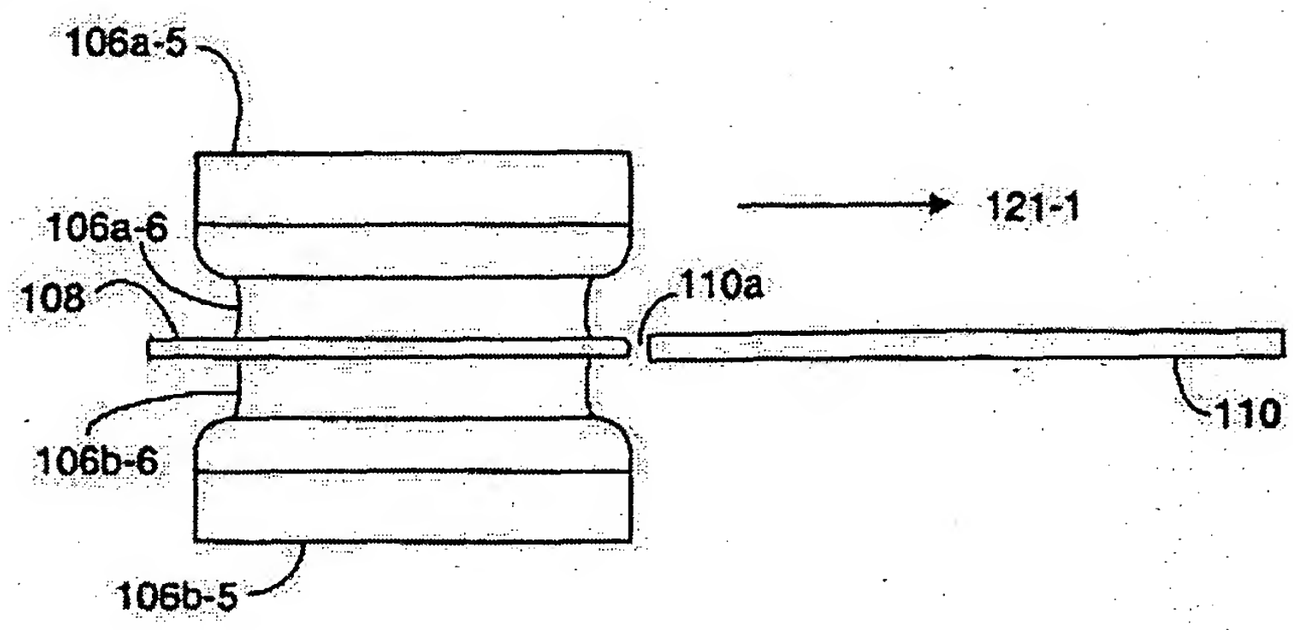

FIGURE 5J

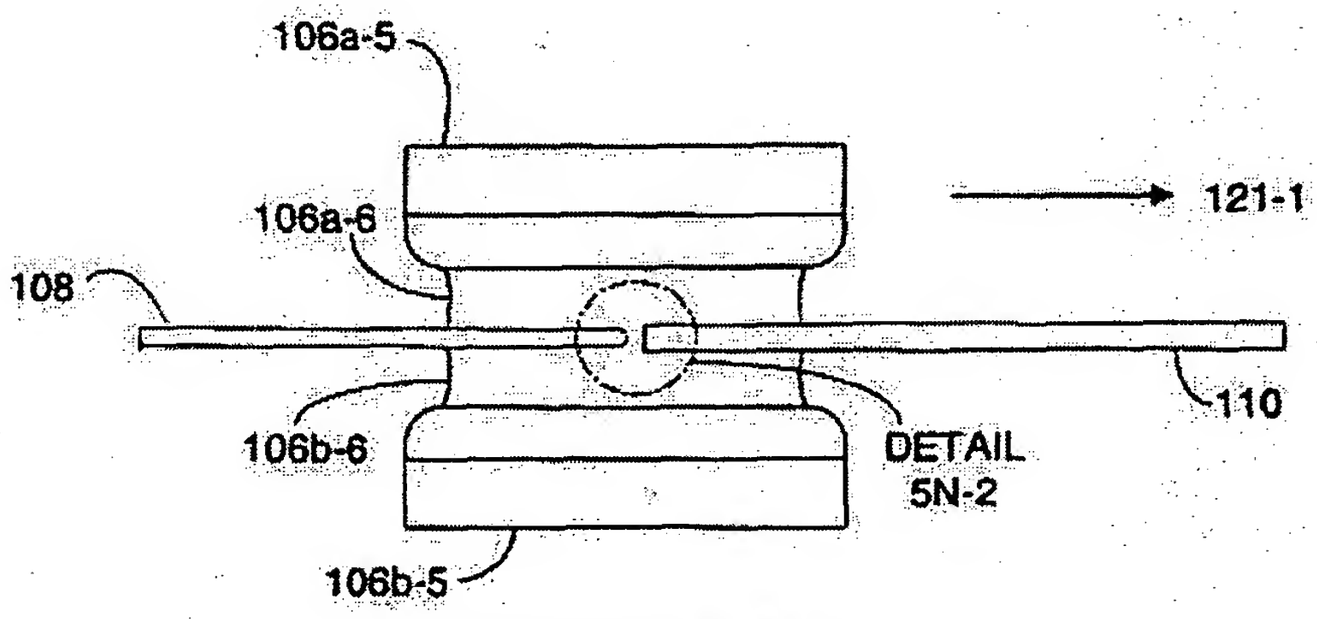

FIGURE 5K

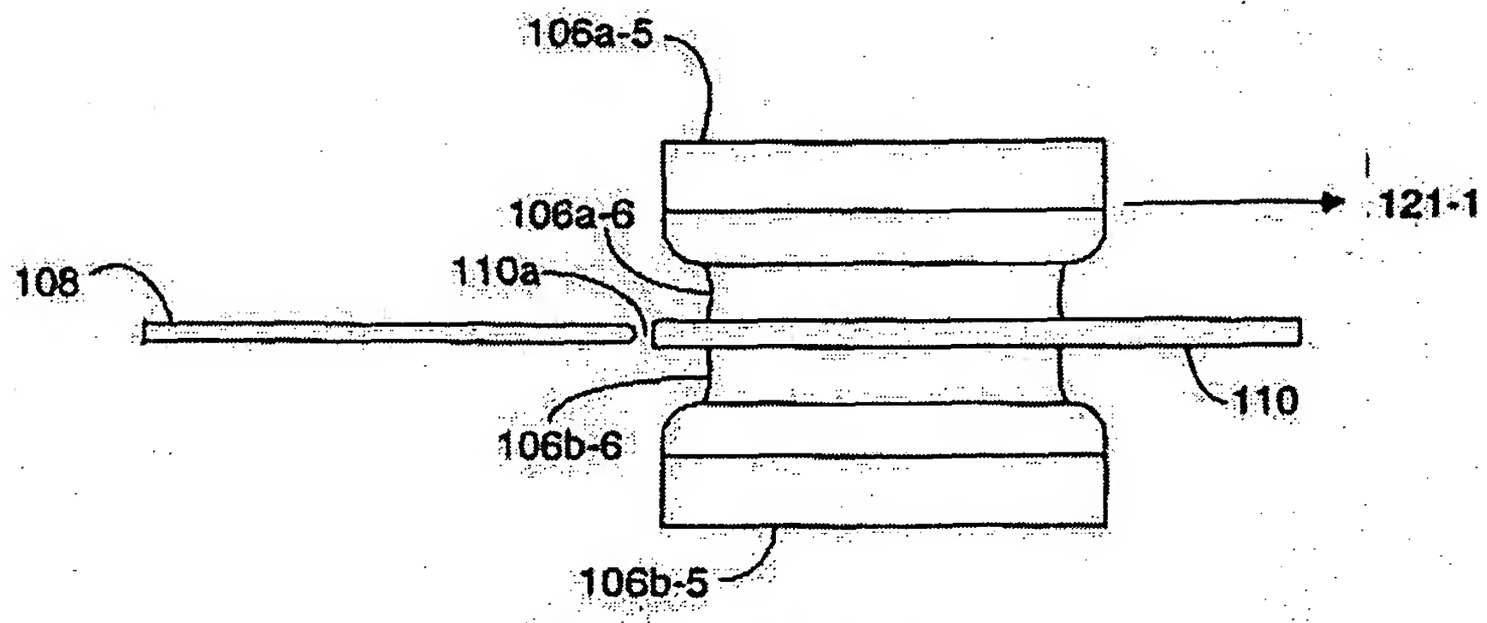

FIGURE 5L

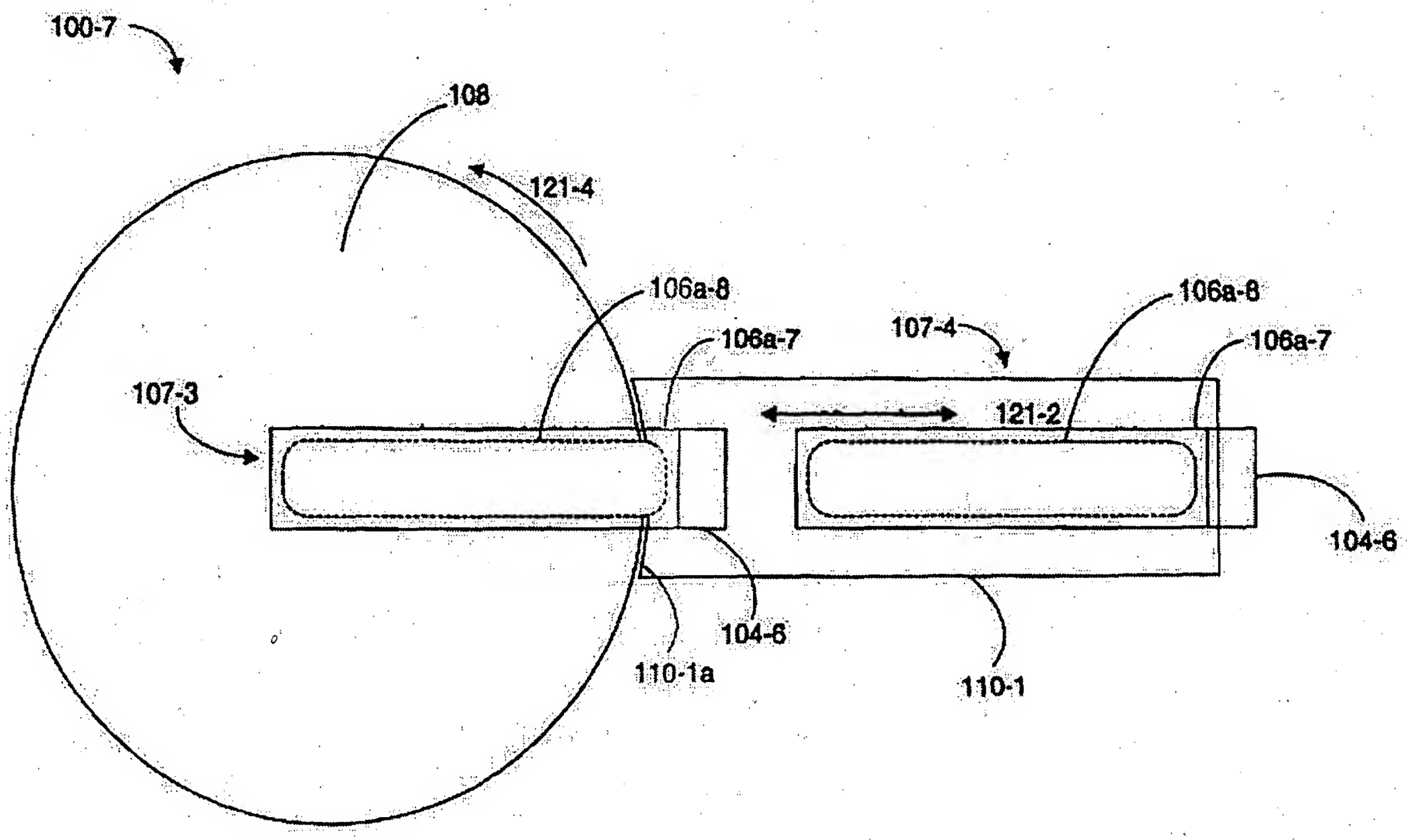
100-7
108
121-4
106a-8
106a-7
107-3
107-4
106a-8
106a-7
121-2
104-6
104-6
110-1a
110-1

FIGURE 5M

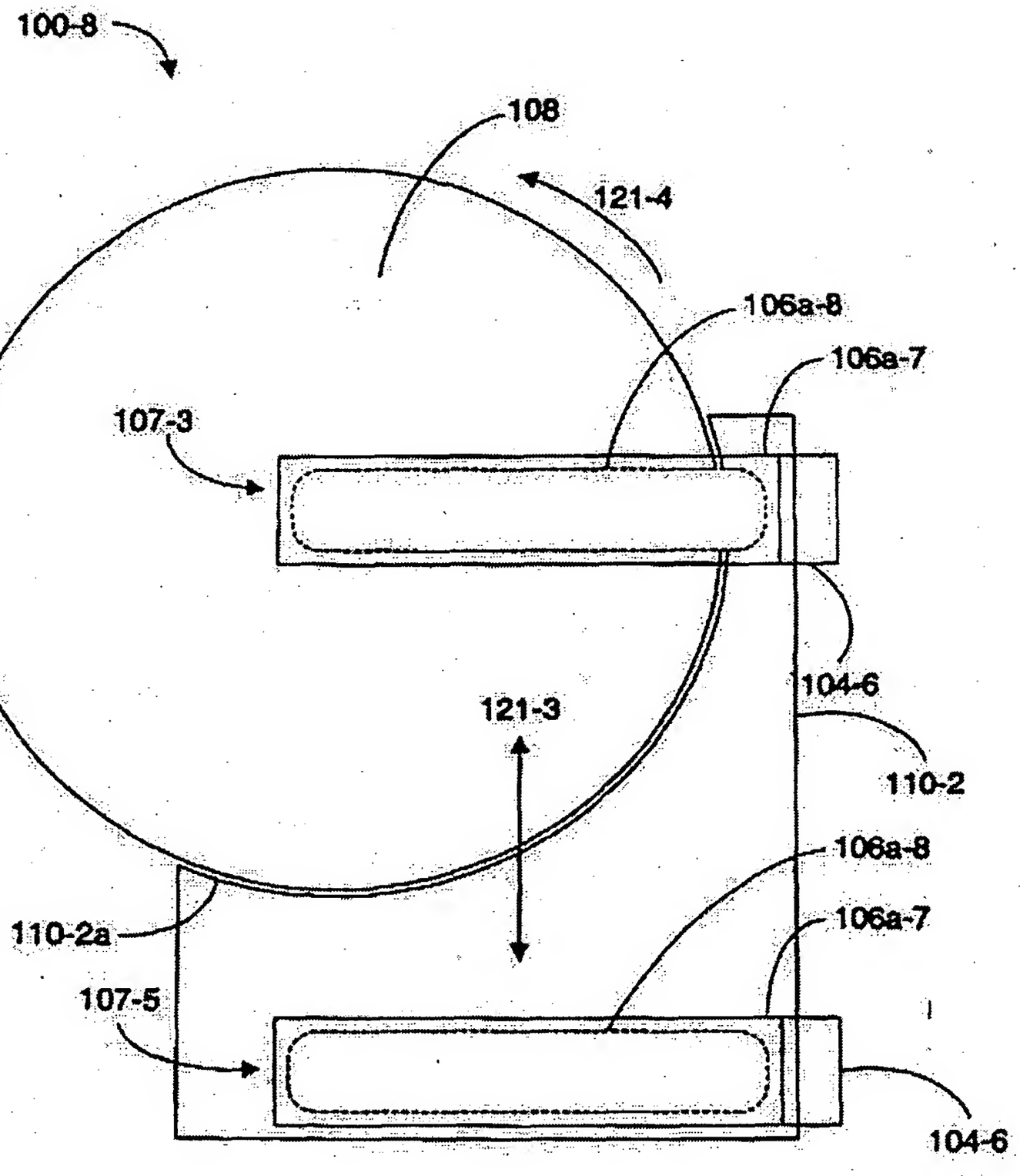
100-8
108
121-4
106a-8
106a-7
107-3
104-6
121-3
110-2
110-2a
106a-8
106a-7
107-5
104-6

FIGURE 5N

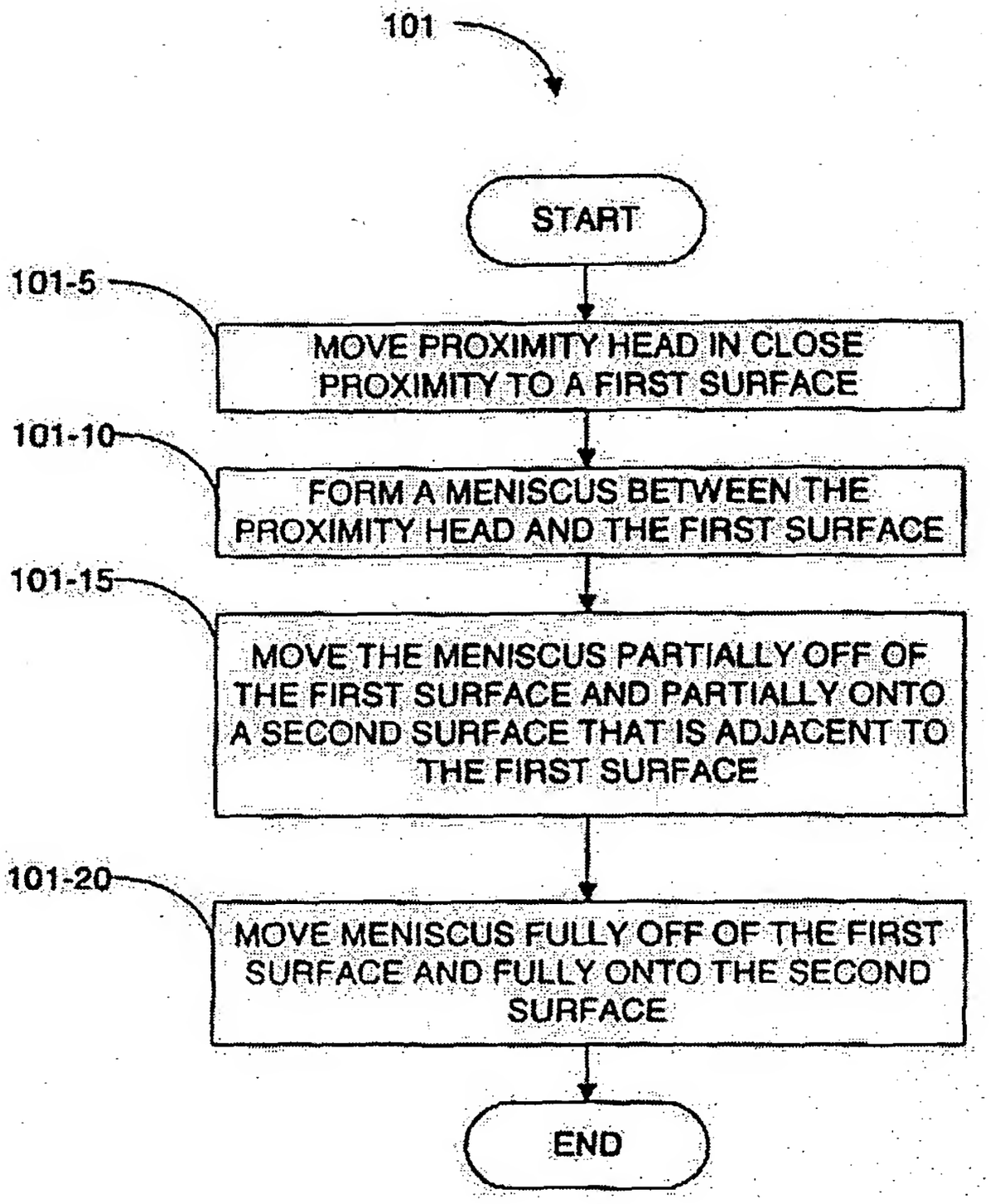
101
START
101-5
MOVE PROXIMITY HEAD IN CLOSE PROXIMITY TO A FIRST SURFACE
101-10
FORM A MENISCUS BETWEEN THE PROXIMITY HEAD AND THE FIRST SURFACE
101-15
MOVE THE MENISCUS PARTIALLY OFF OF THE FIRST SURFACE AND PARTIALLY ONTO A SECOND SURFACE THAT IS ADJACENT TO THE FIRST SURFACE
101-20
MOVE MENISCUS FULLY OFF OF THE FIRST SURFACE AND FULLY ONTO THE SECOND SURFACE
END

FIGURE 5N-1

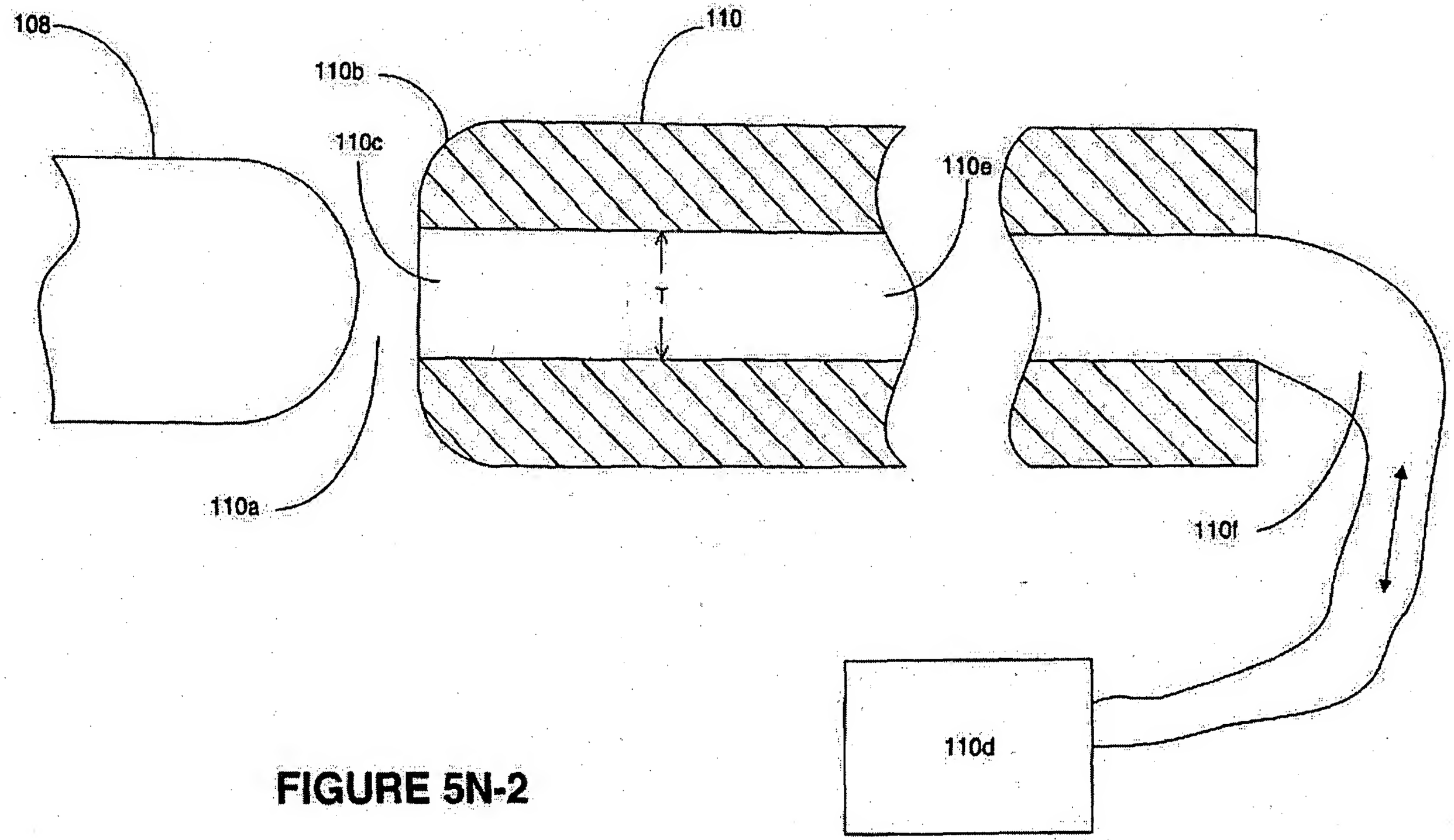

FIGURE 5N-2

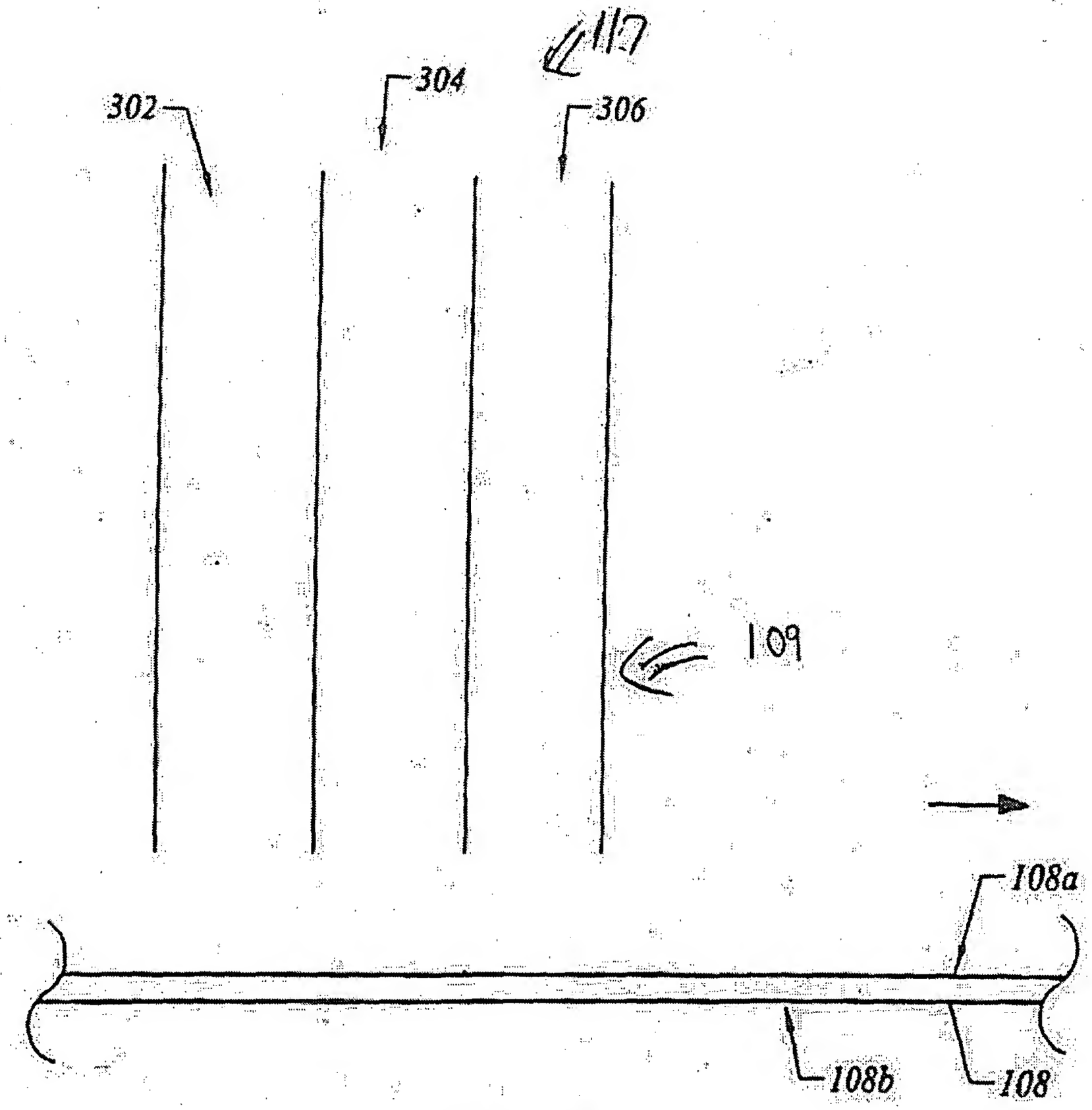

FIG 6A

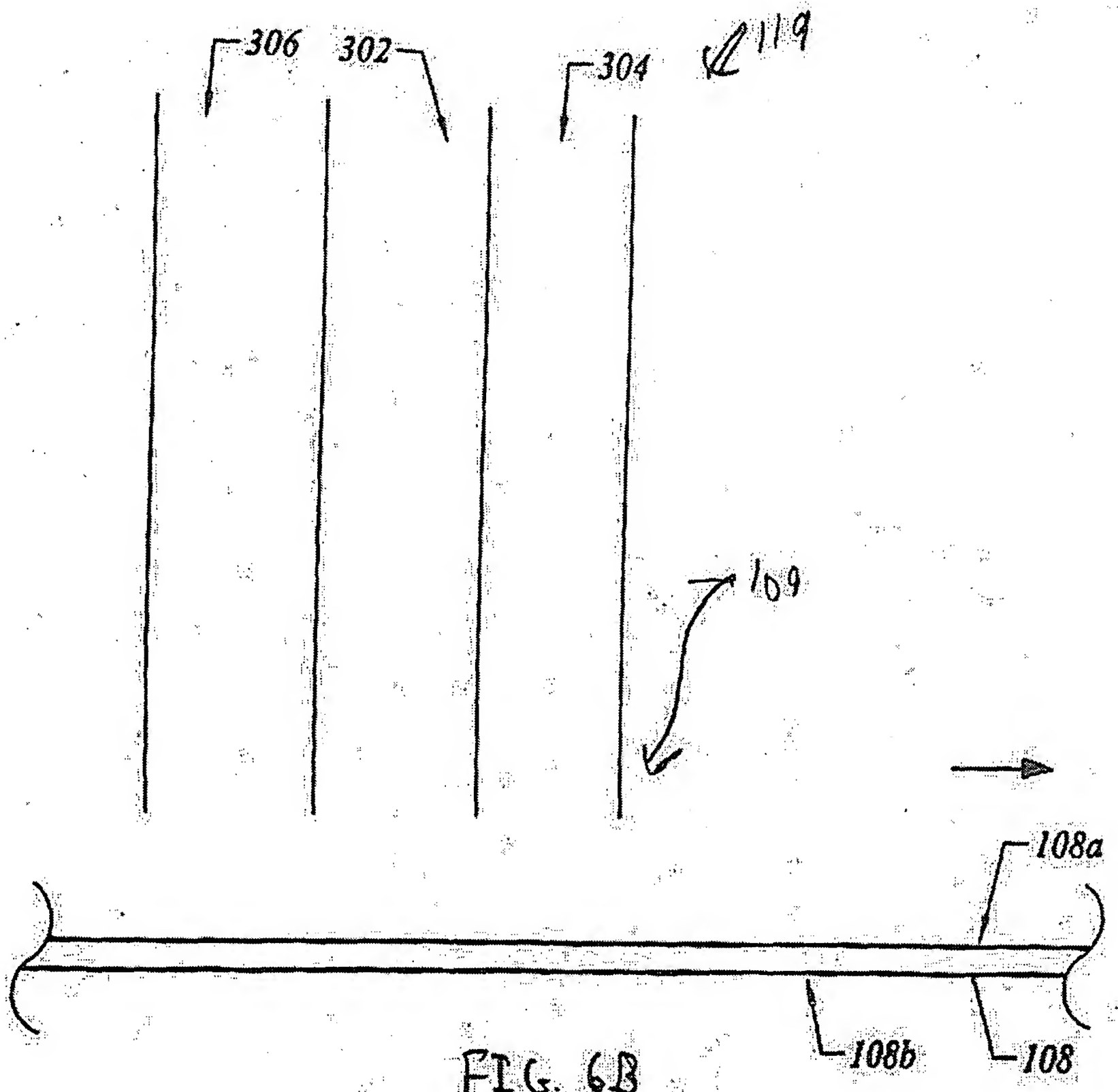

FIG. 6B

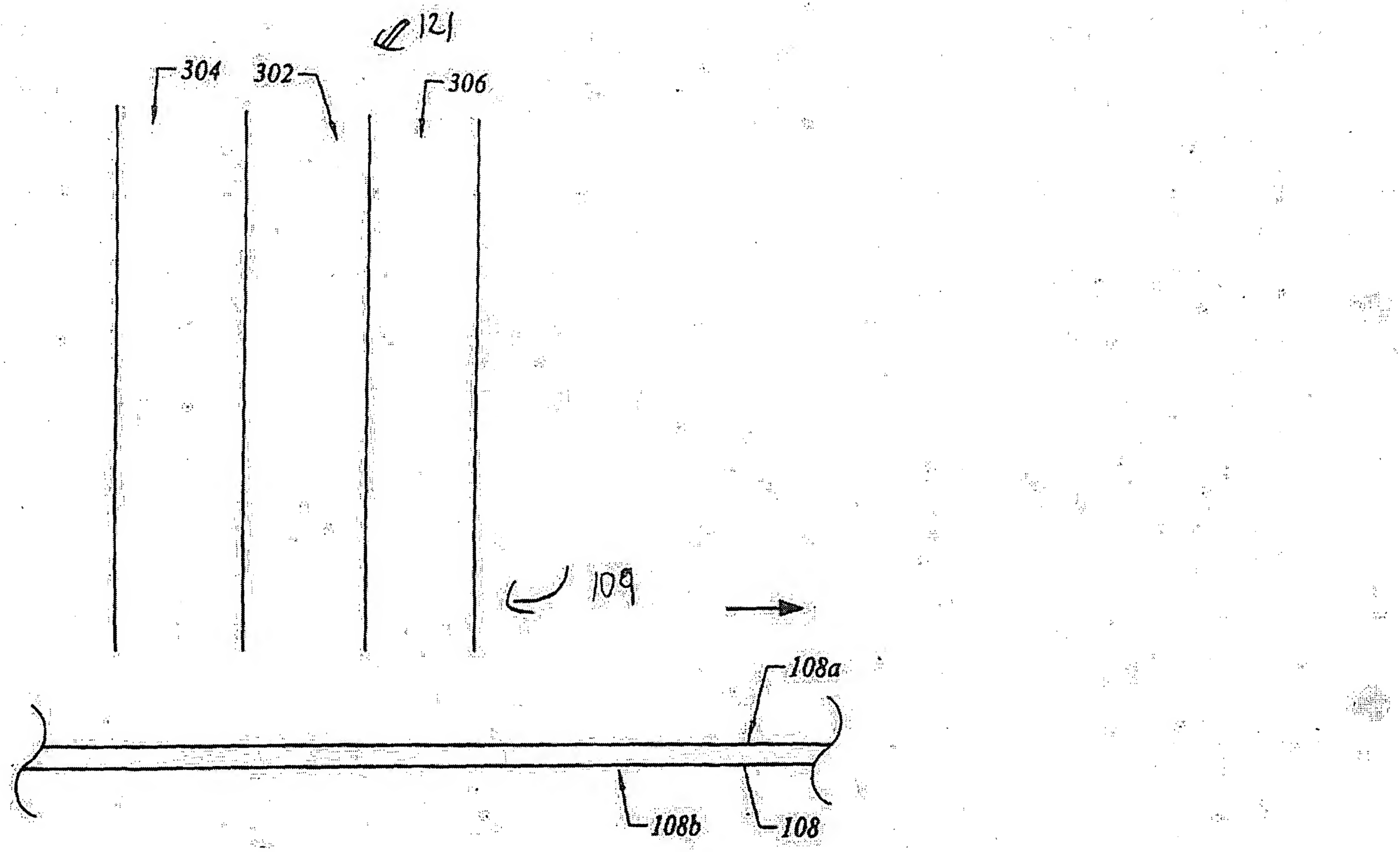

FIG. 6G

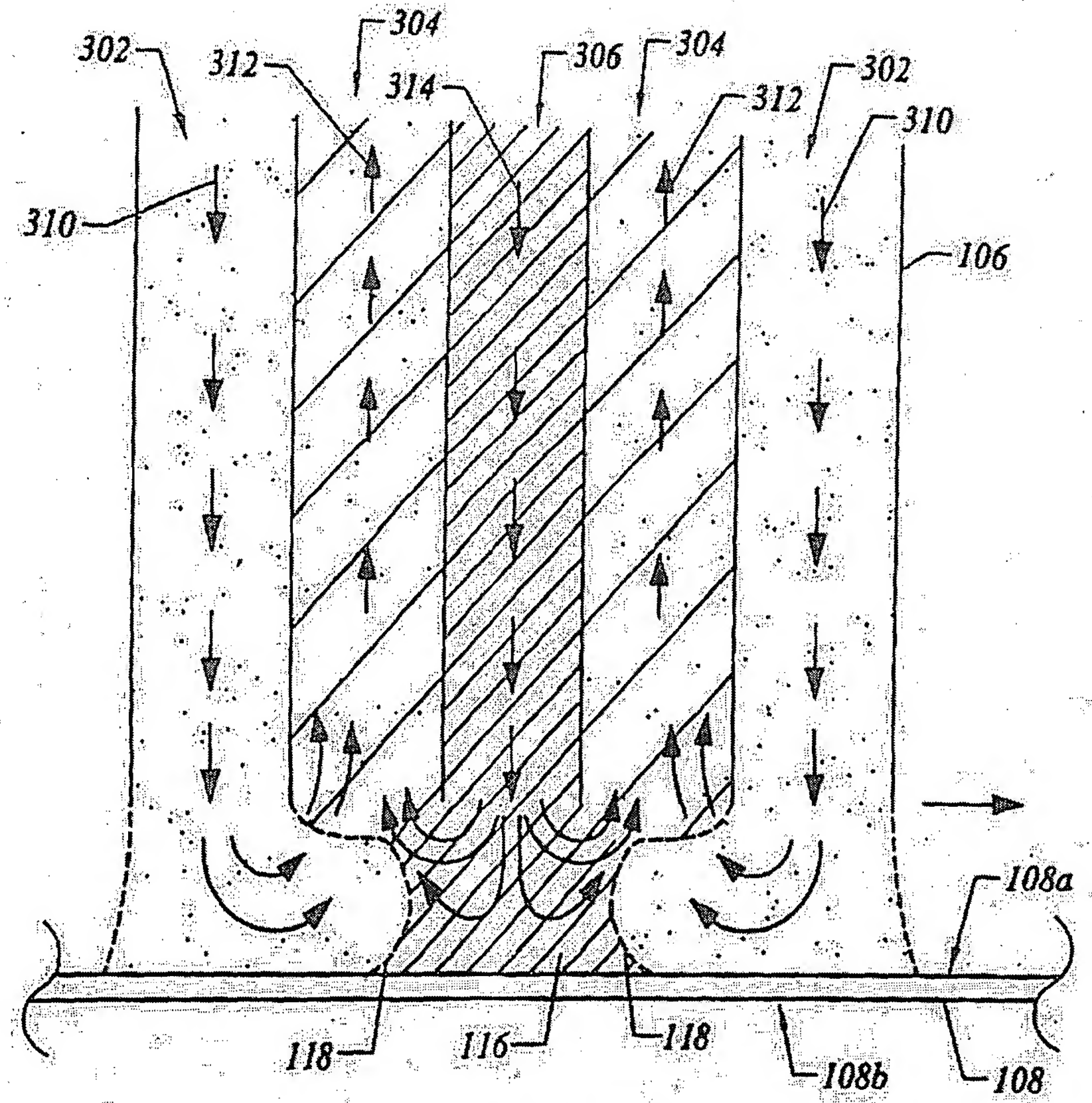
302
312
304
314
306
304
312
302
310
310
106
108a
118
116
118
108b
108

FIG. 6D

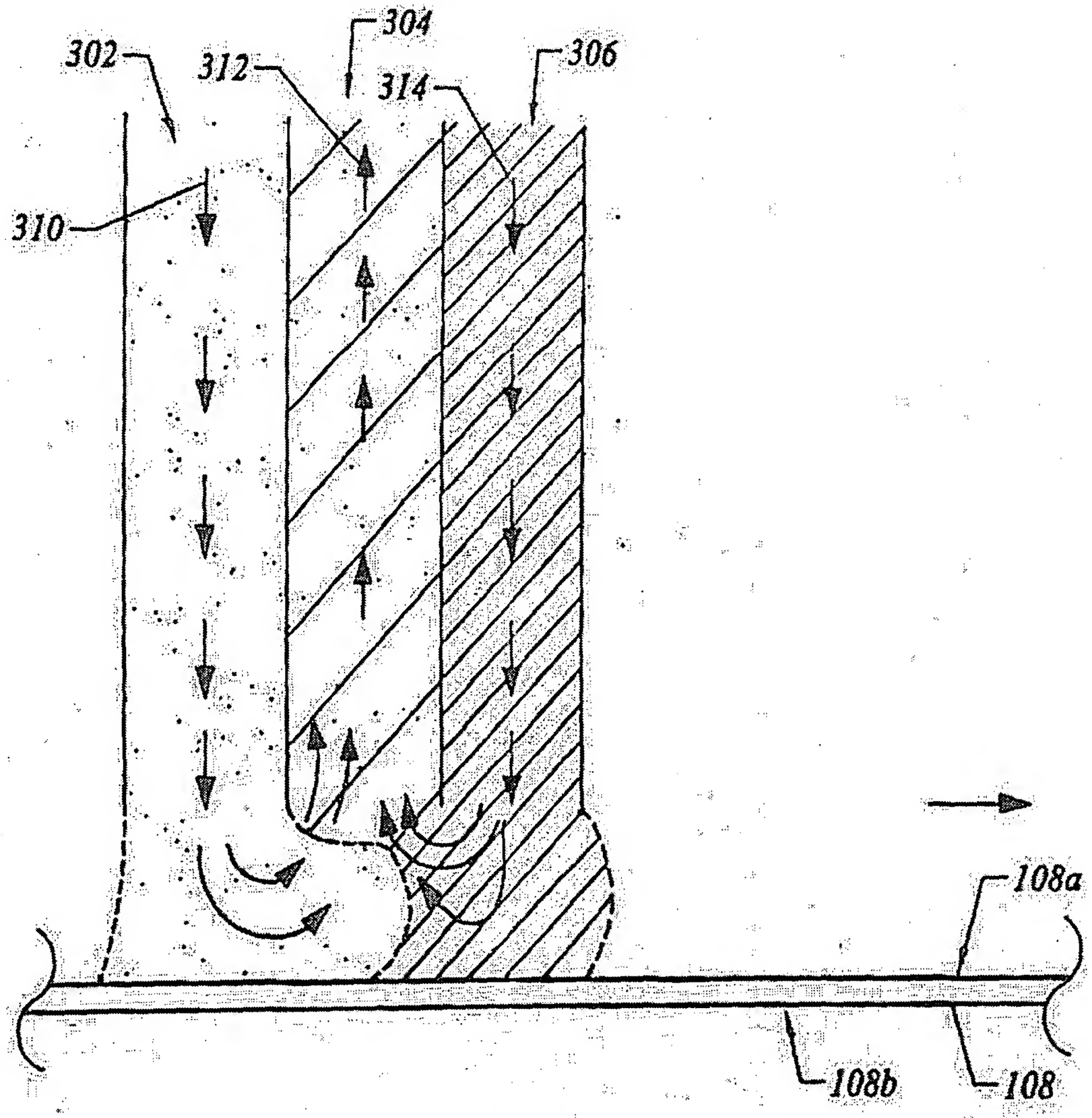

FIG. 6E

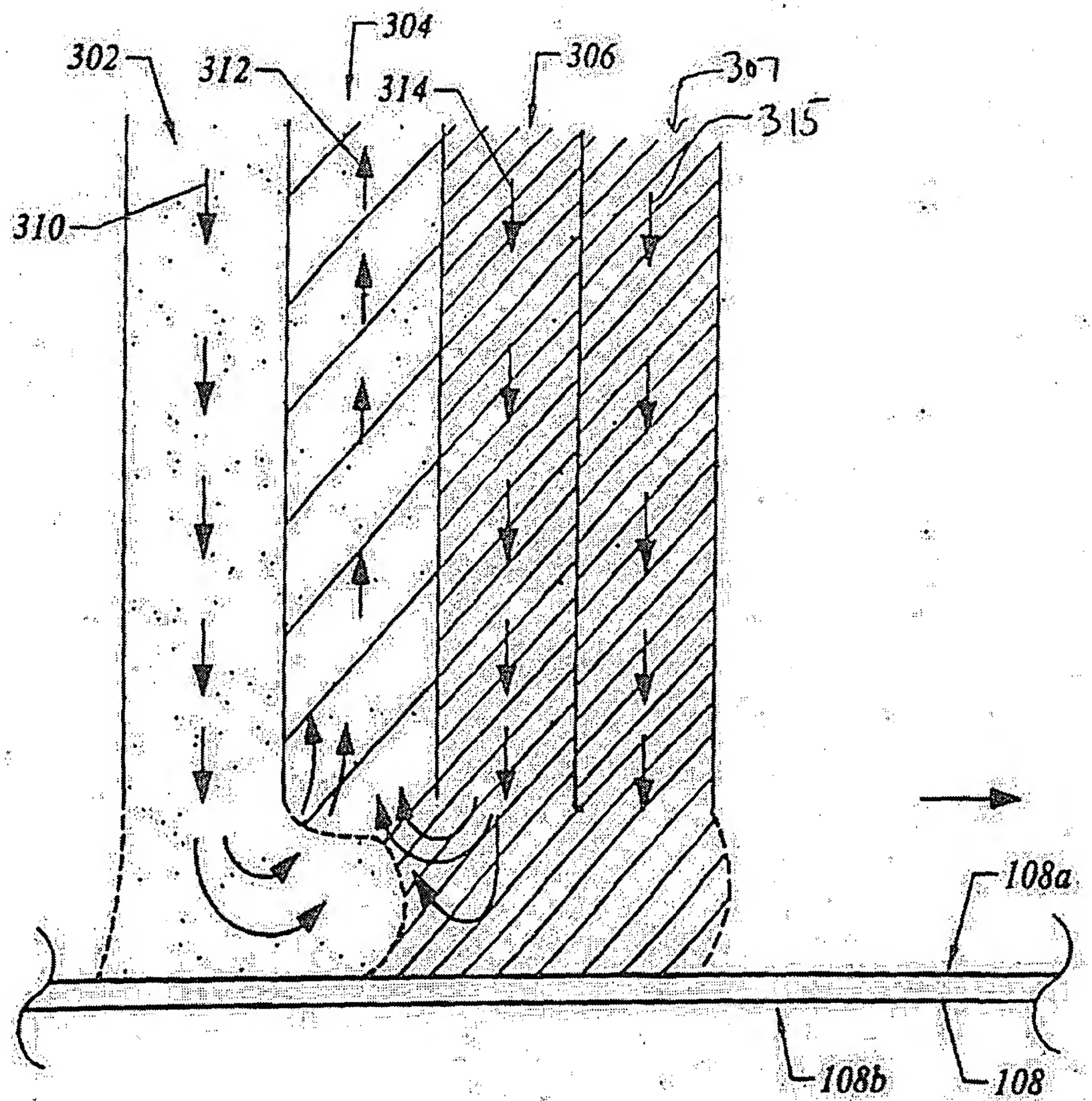

FIG. 6F

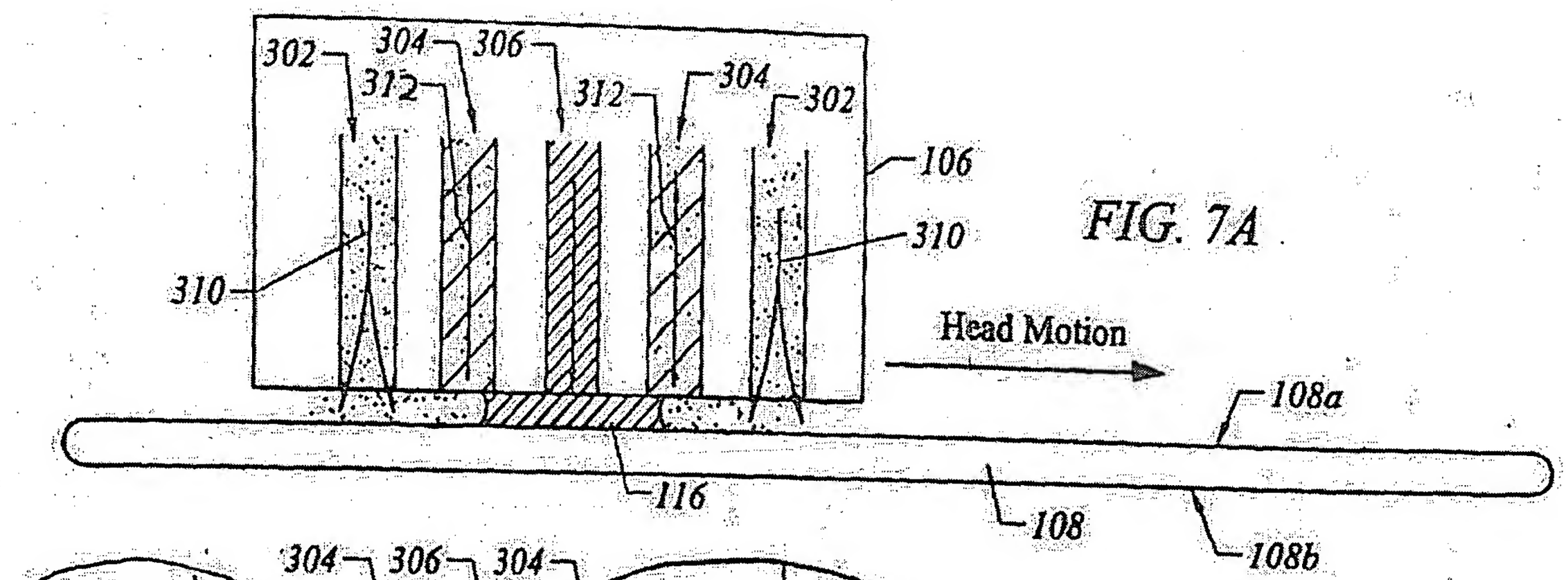
302
304
306
312
312
304
302
106
310
310
Head Motion
108a
116
108
108b

FIG. 7A

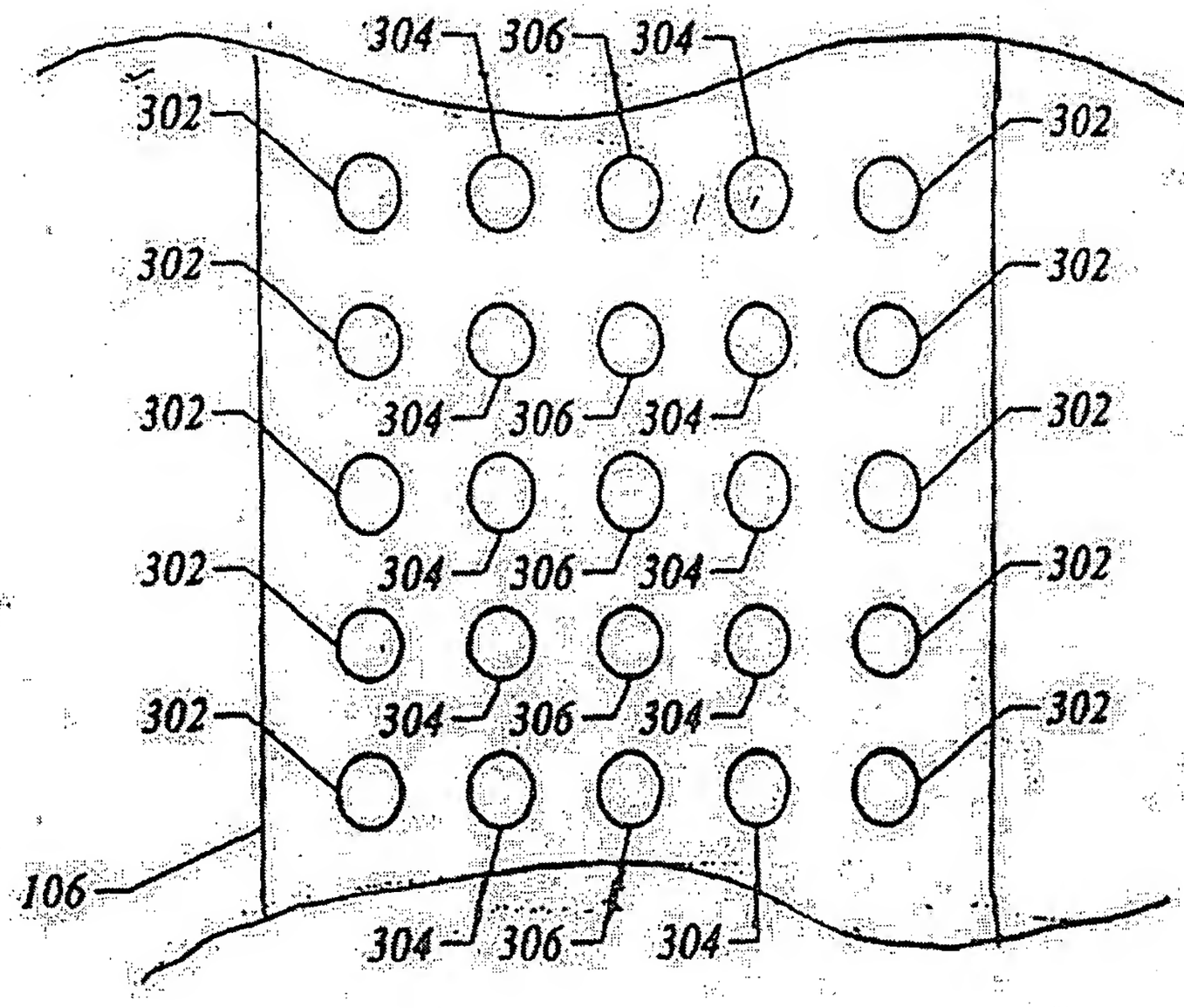
304
306
304
302
302
302
302
304
306
304
302
302
304
306
304
302
302
304
306
304
302
302
304
306
304
106

FIG. 7B

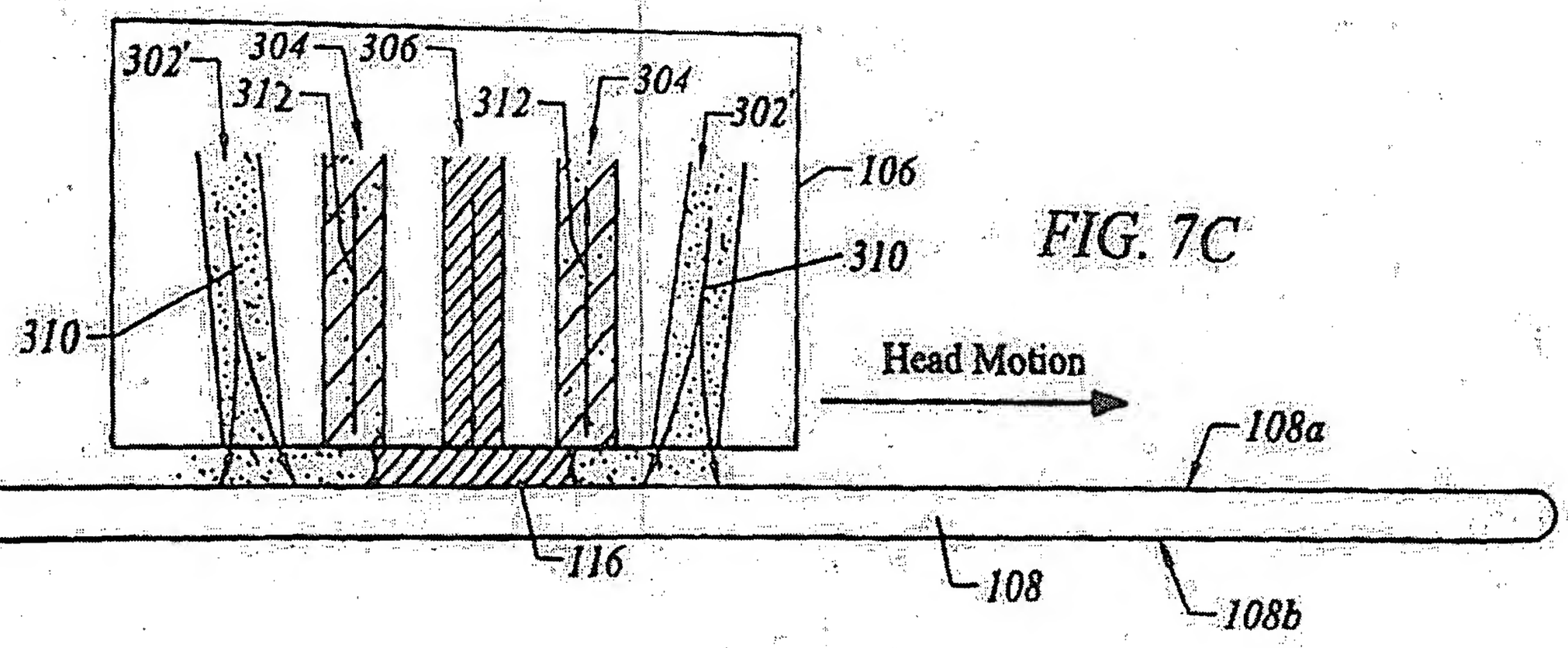
302'
304
306
312
312
304
302'
106
310
310
Head Motion
108a
116
108
108b

FIG. 7C

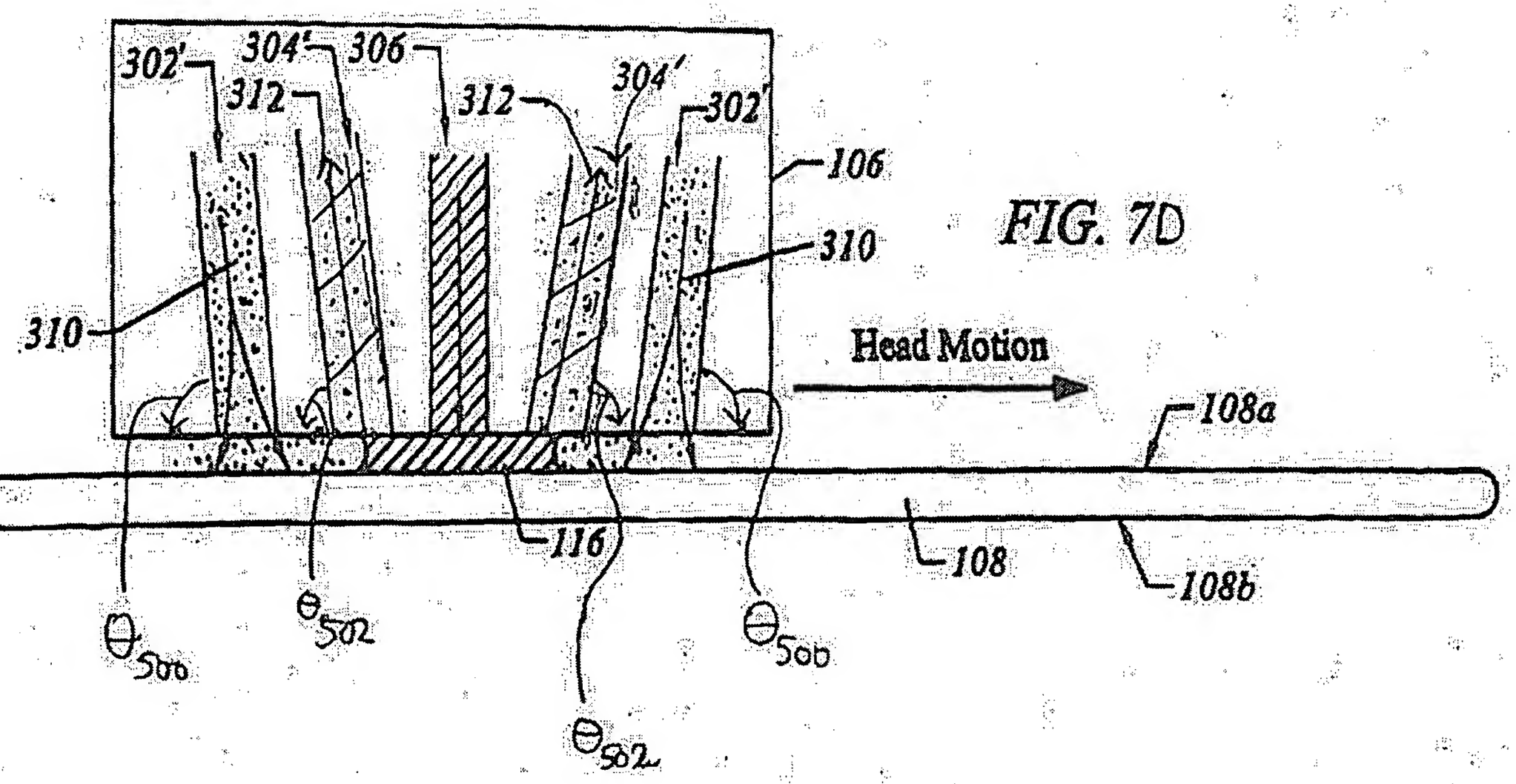
302'
304'
306
312
312
304'
302'
106
310
310
Head Motion
108a
116
108
108b
θ500
θ502
θ502
θ500

FIG. 7D

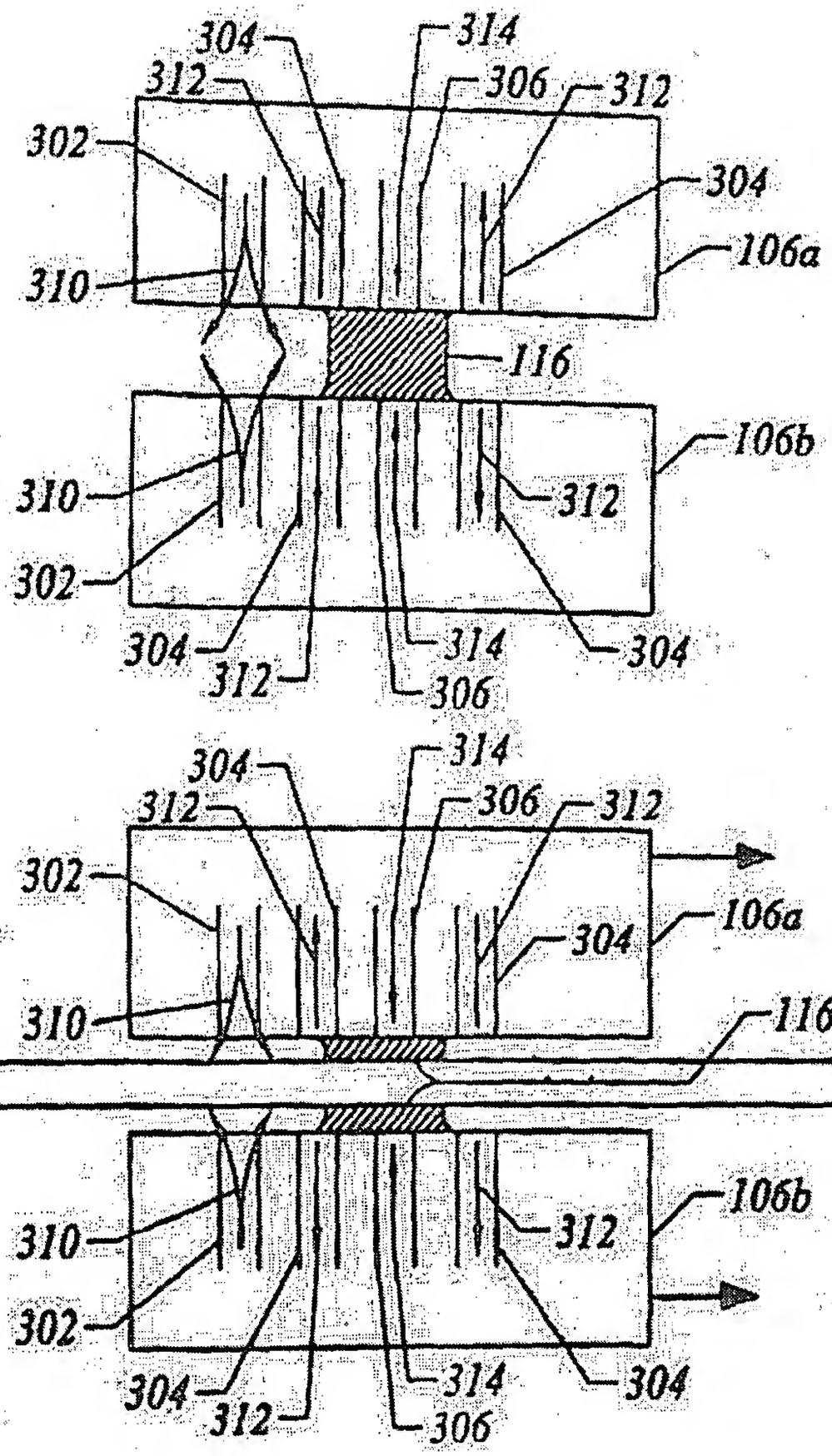
304
312
314
306
312
302
304
106a
310
116
106b
310
312
302
304
314
304
312
306
304
312
314
306
312
302
304
106a
108a
310
116
108
106b
310
312
302
304
314
304
312
306
108b

FIG. 8A

FIG. 8B

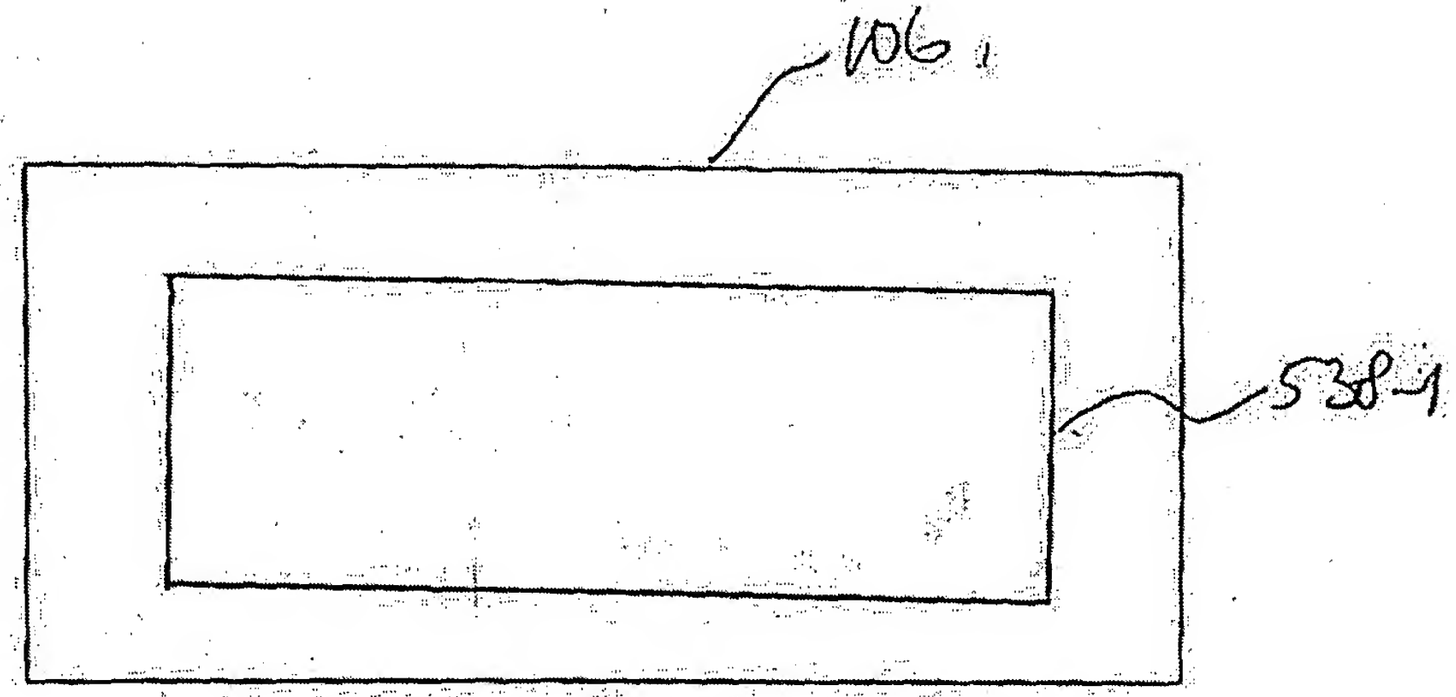

FIG. 9A

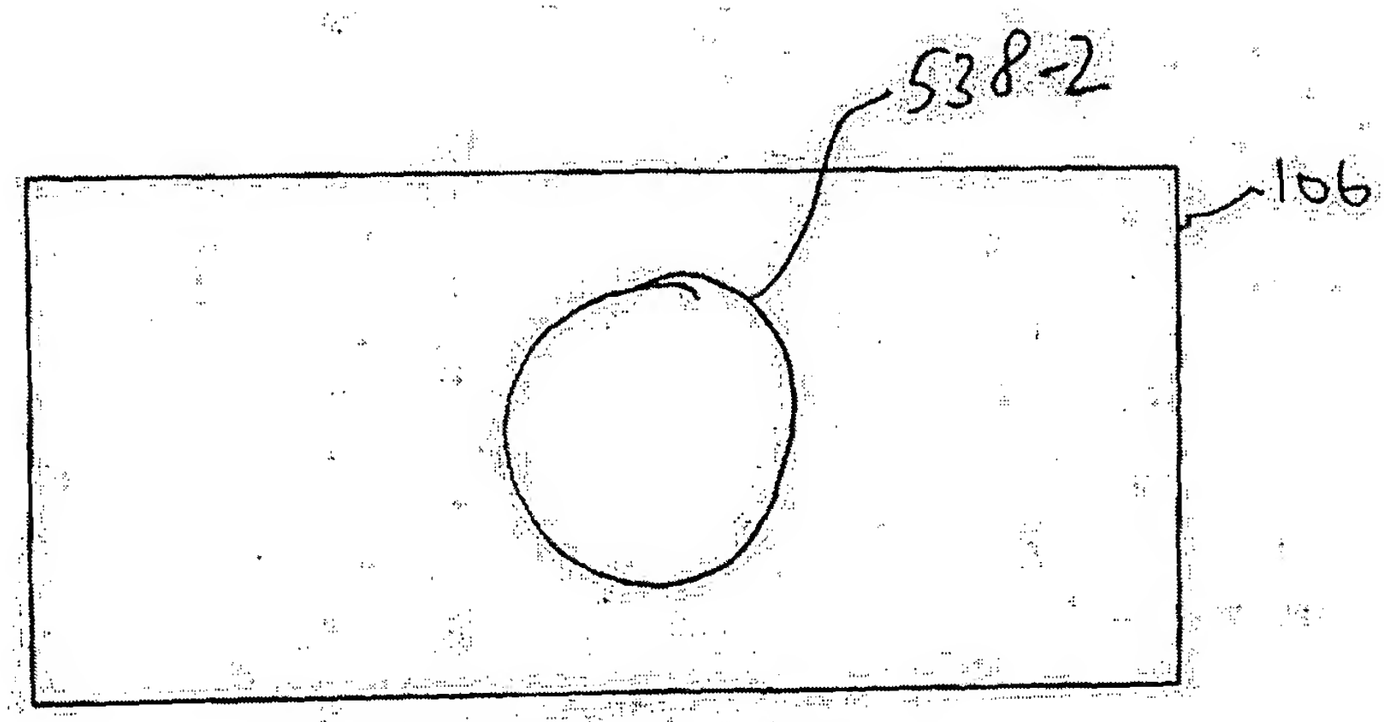

FIG. 9B

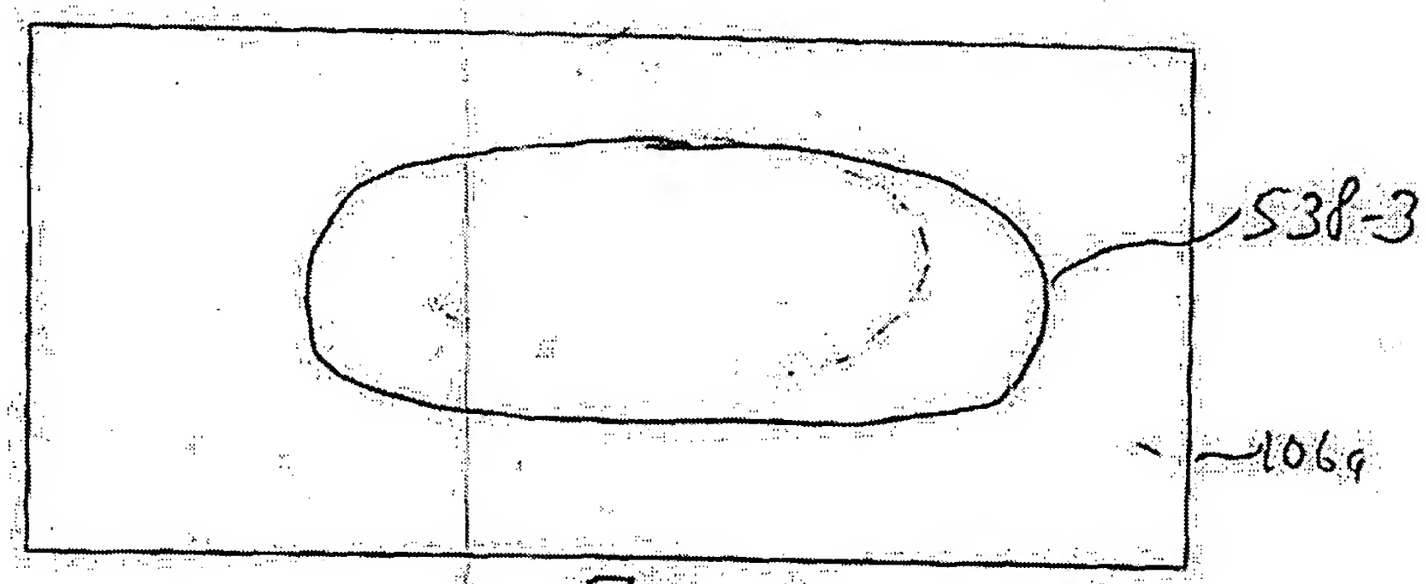

FIG. 9C

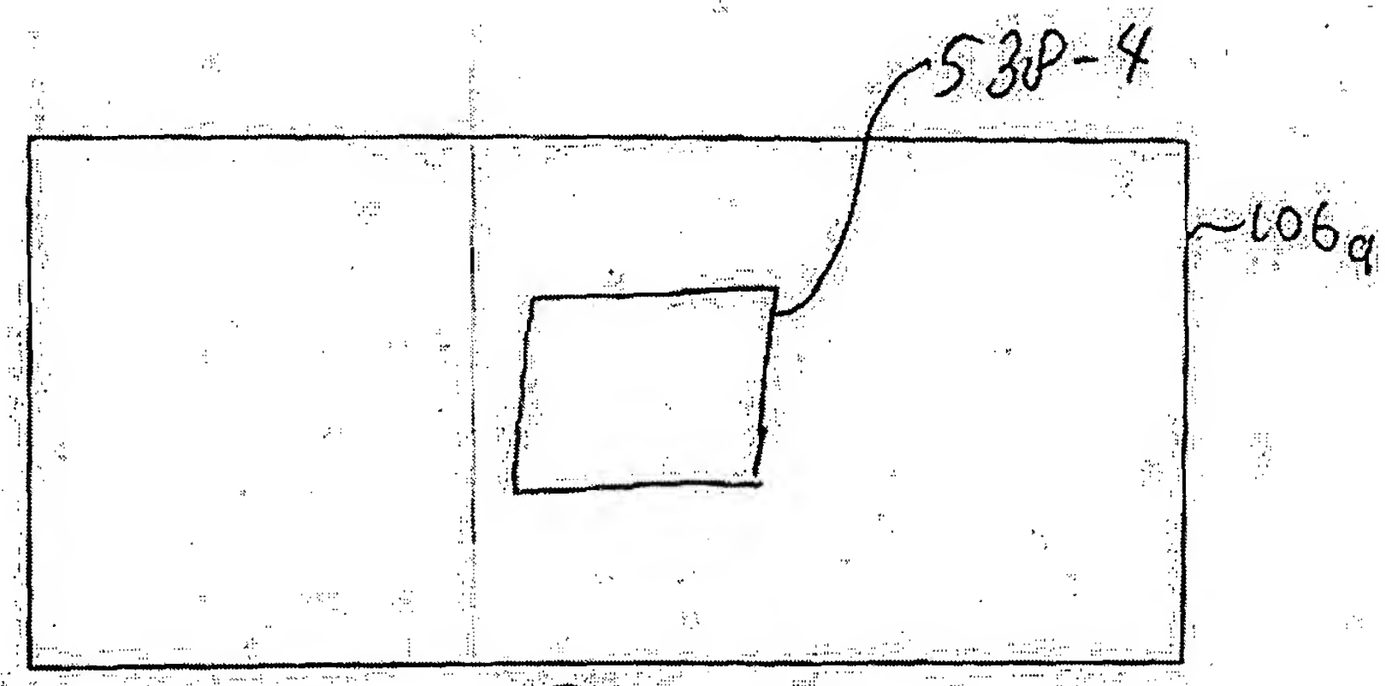

FIG. 9D

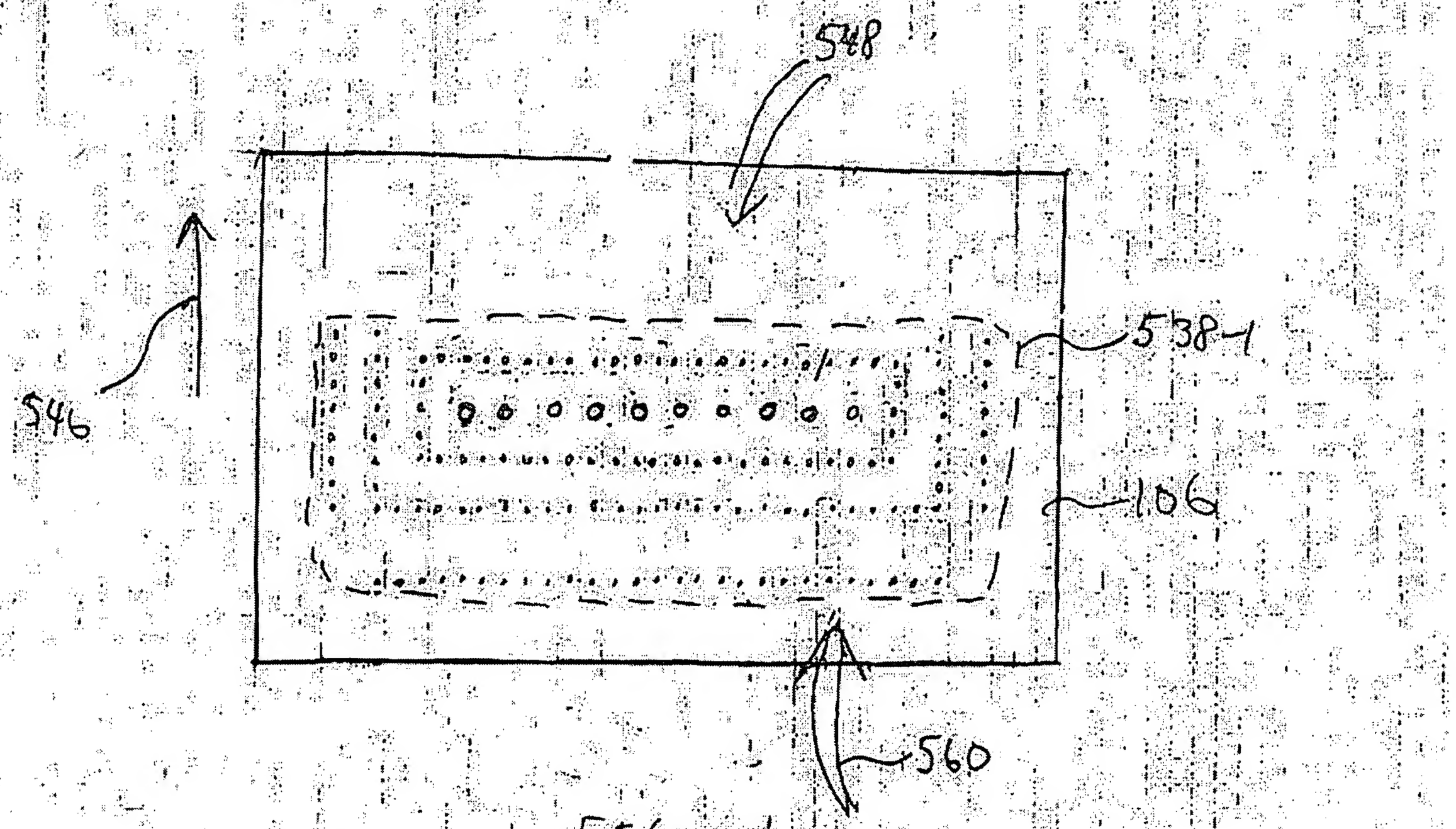

FIG. 10A

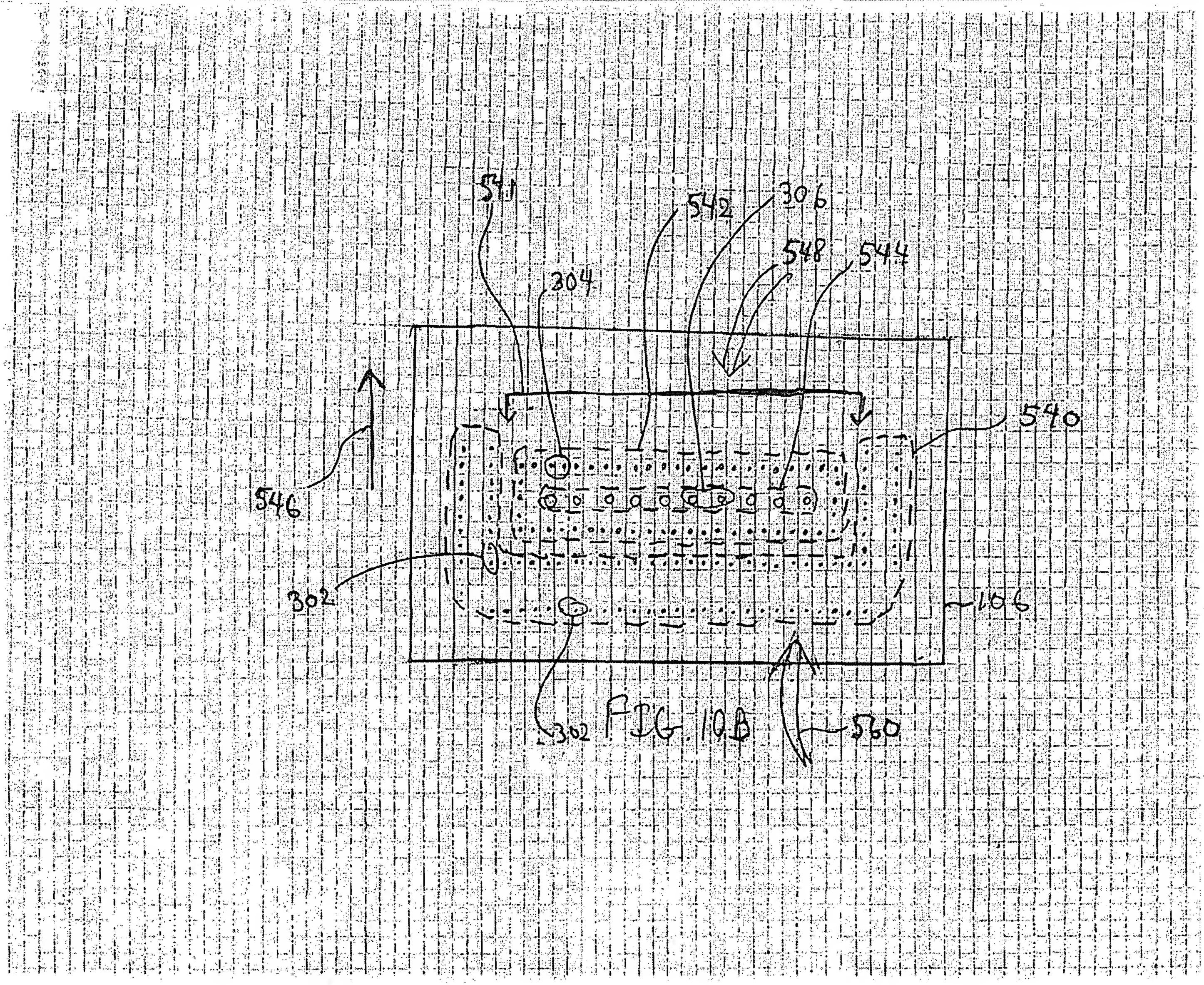

FIG. 10B

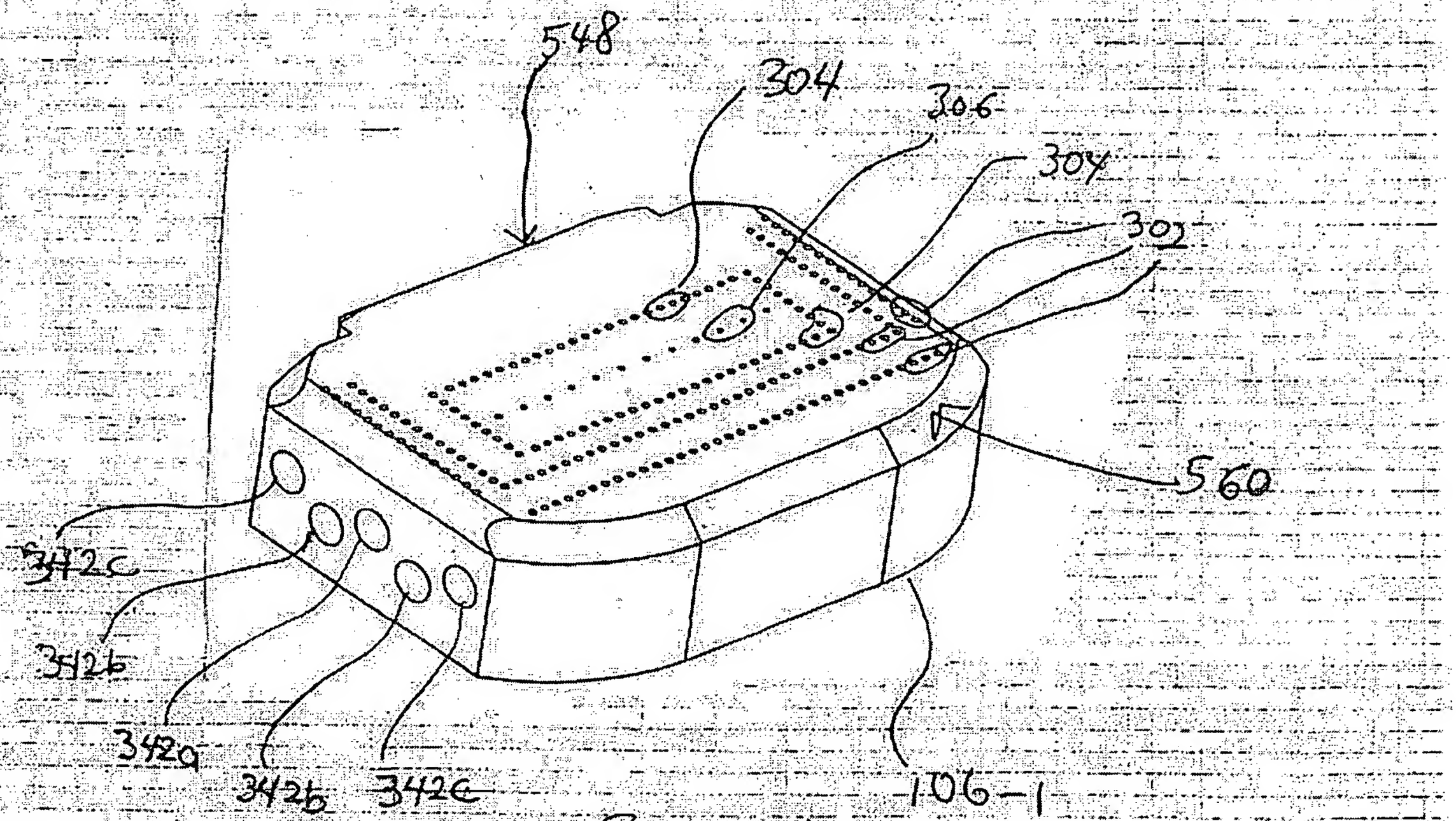

FIG 1A

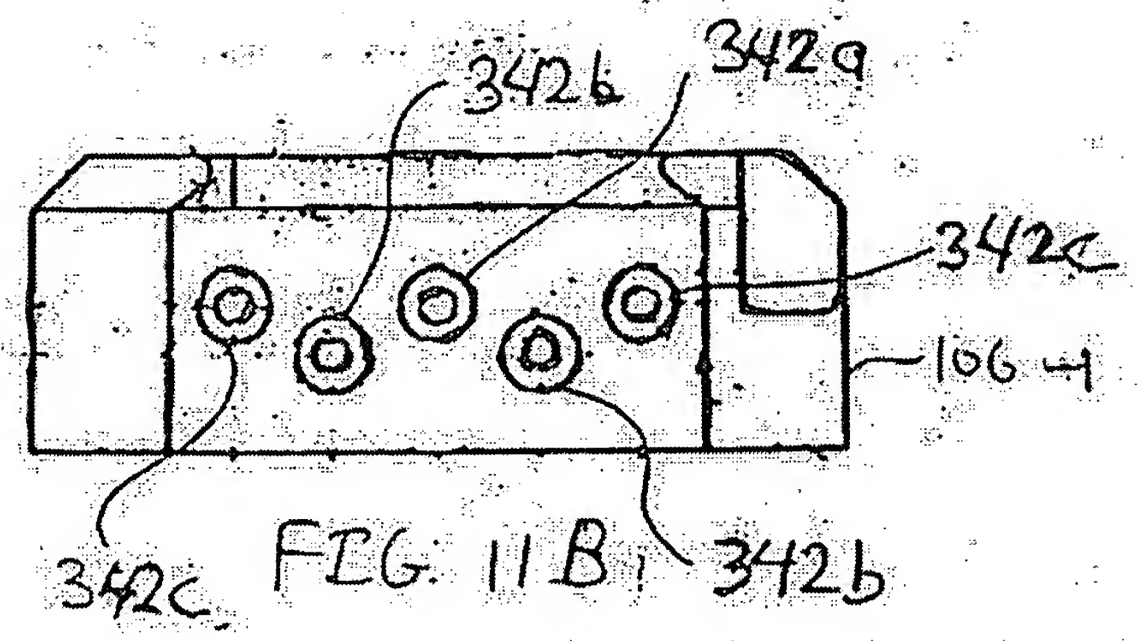

FIG. 11B

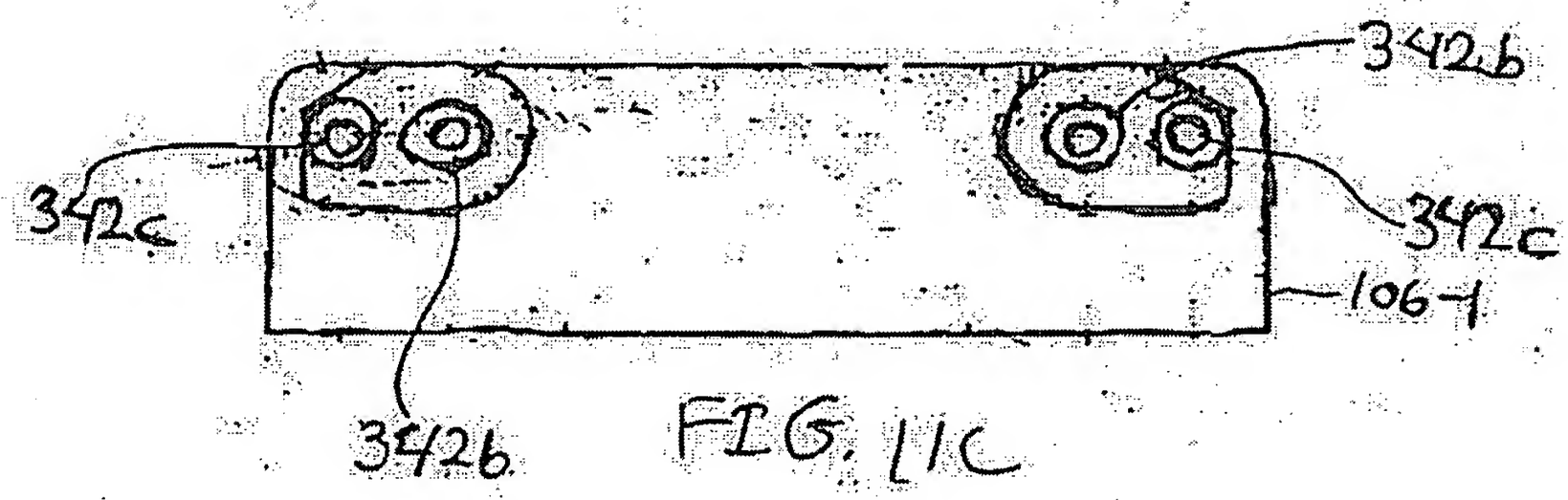

FIG. 11C

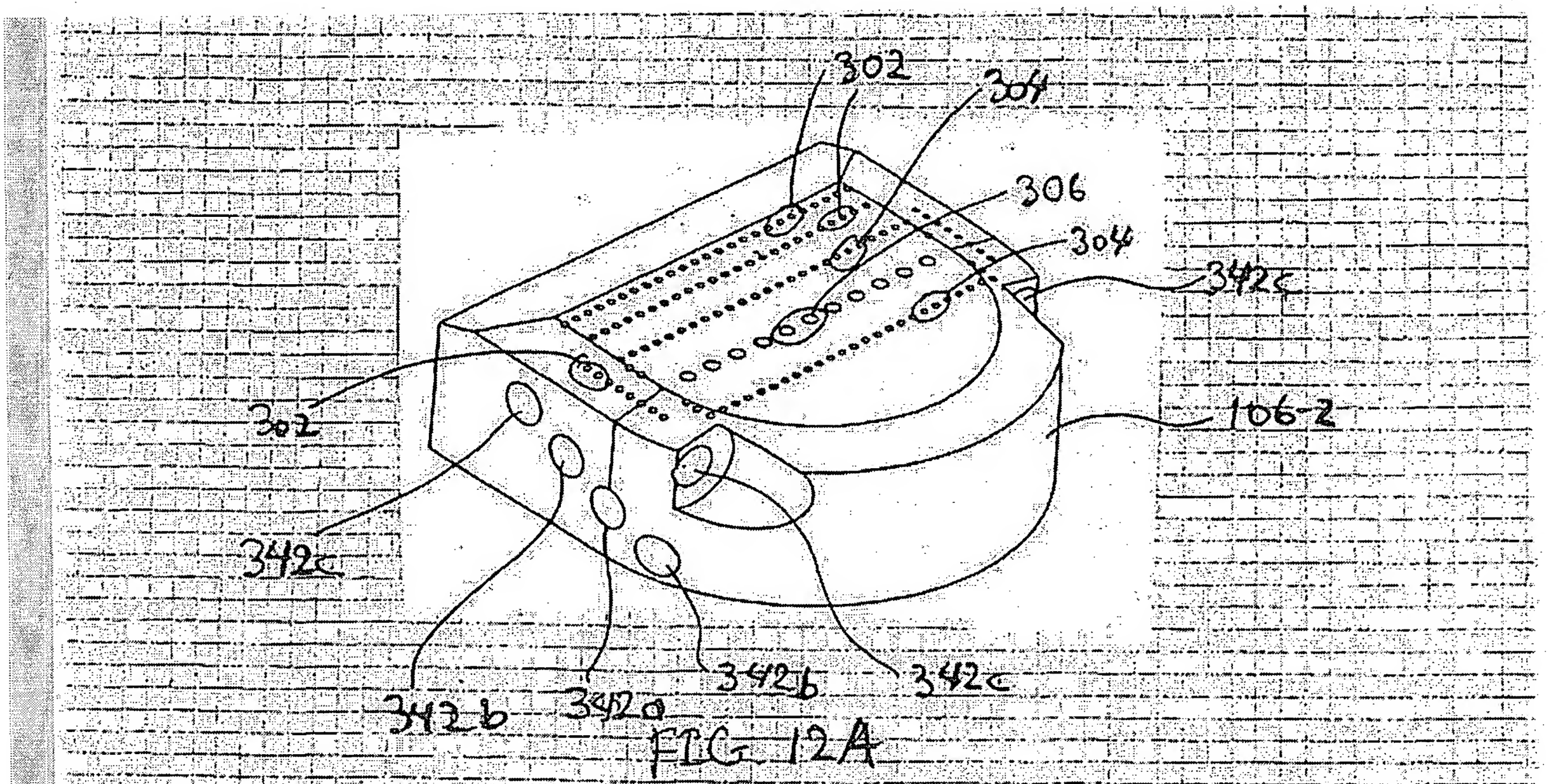

FIG. 12A

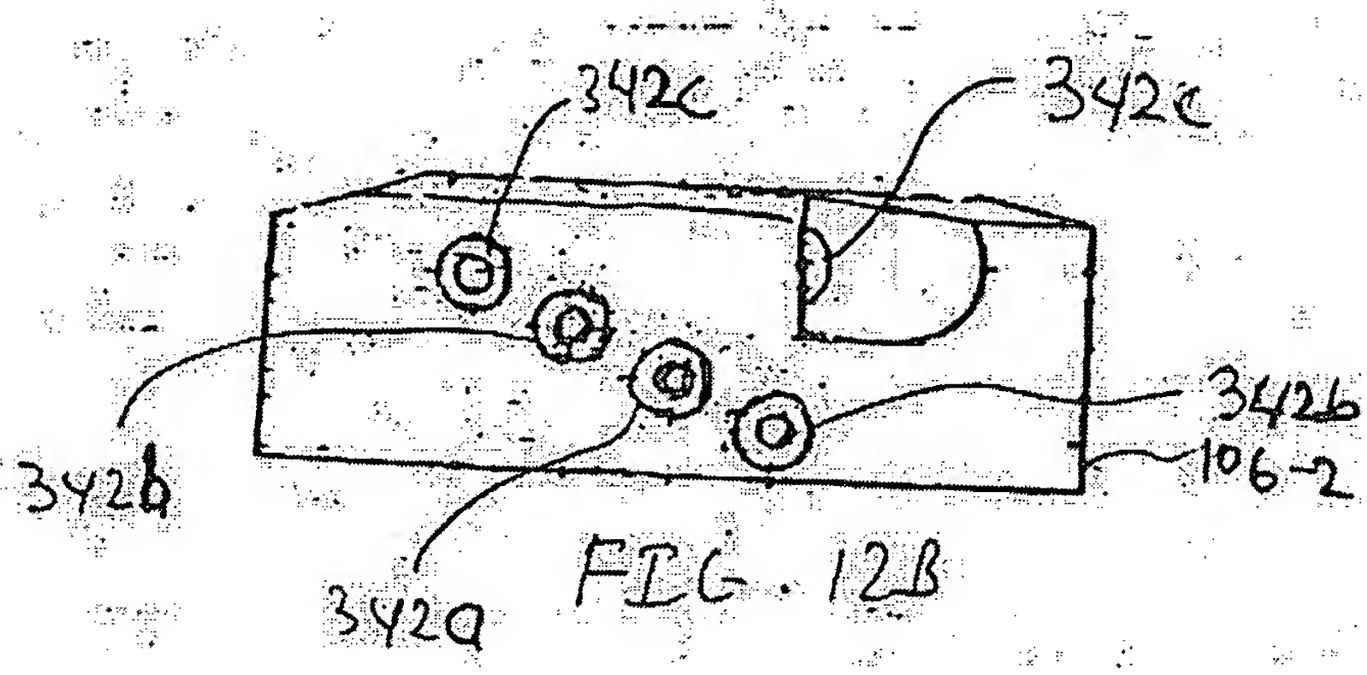

FIG. 12B

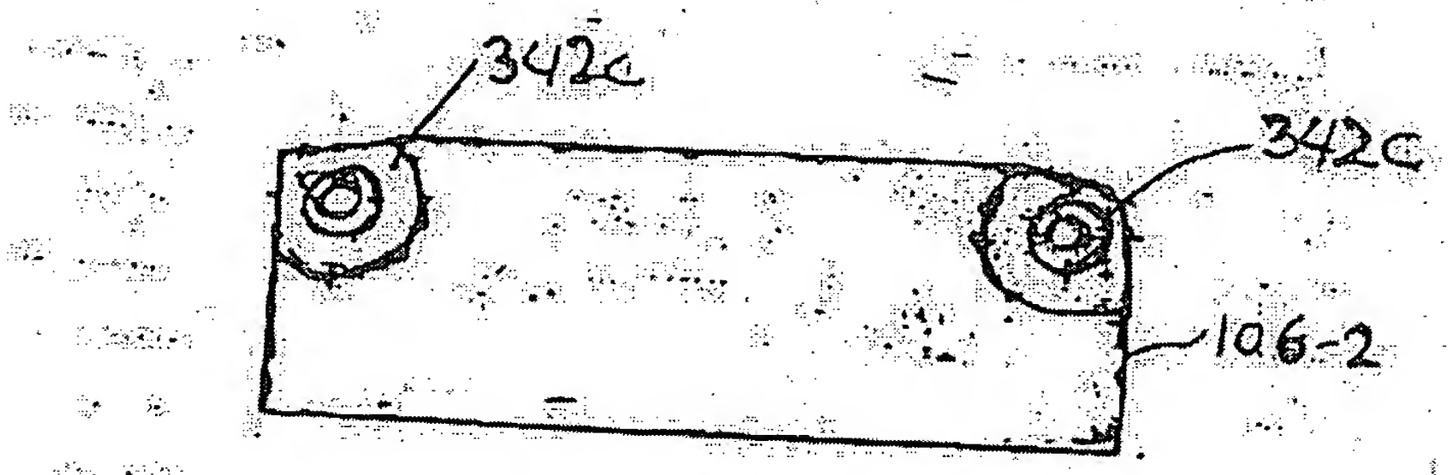

FIG. 12C

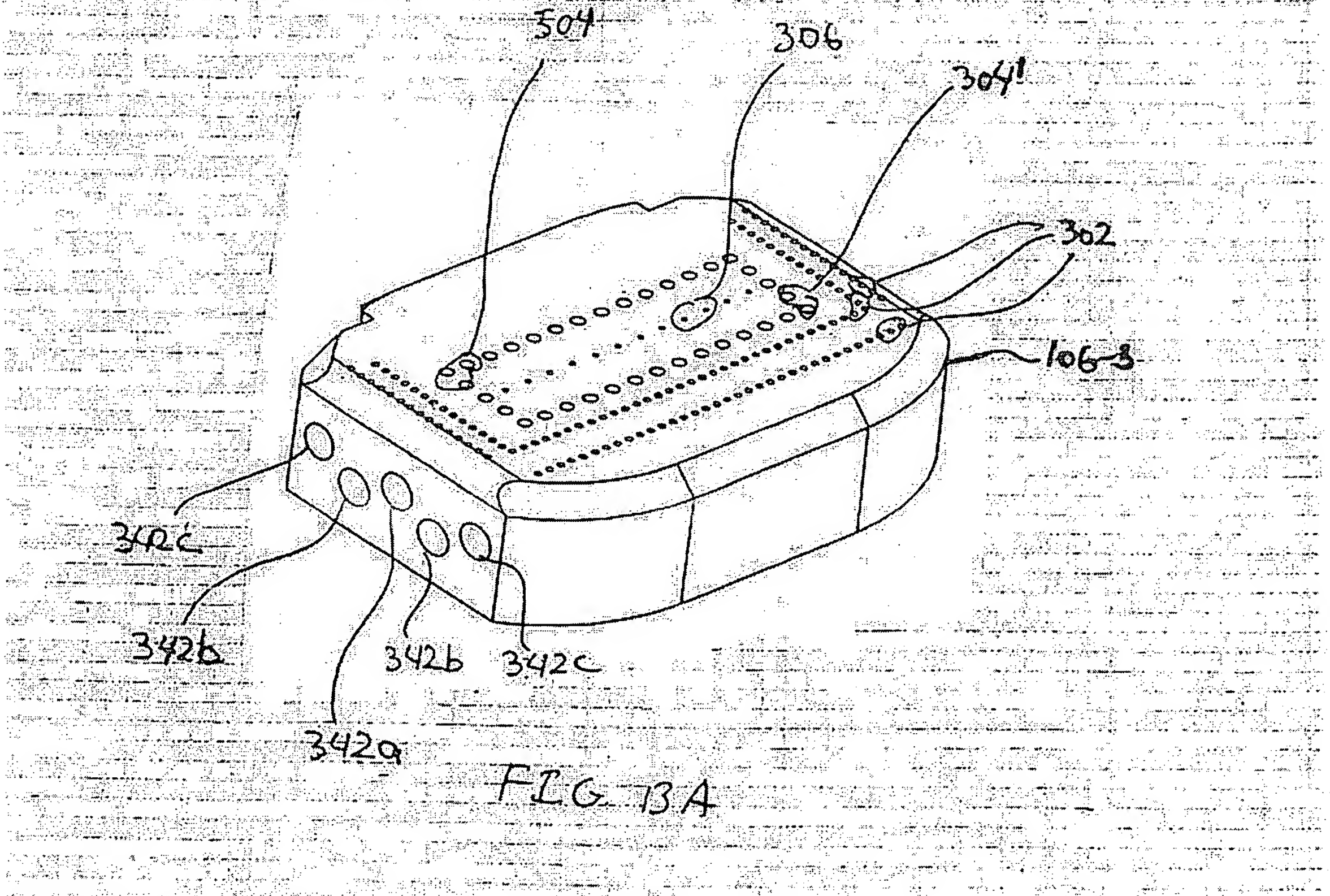

FIG. 13A

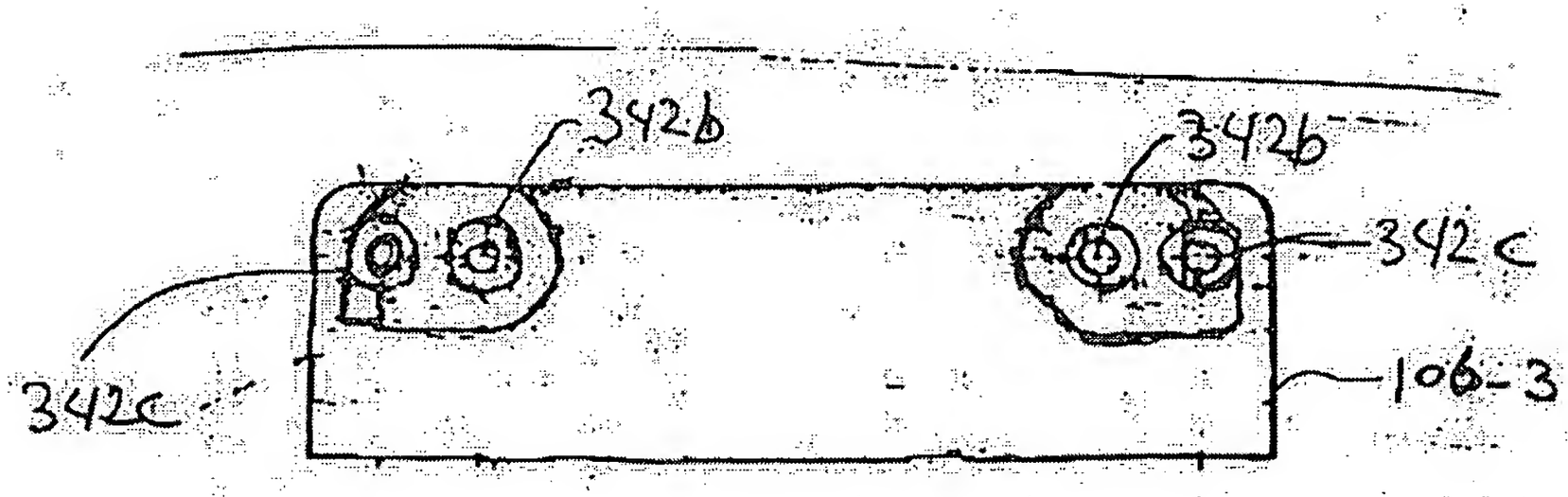

FIG. 13B

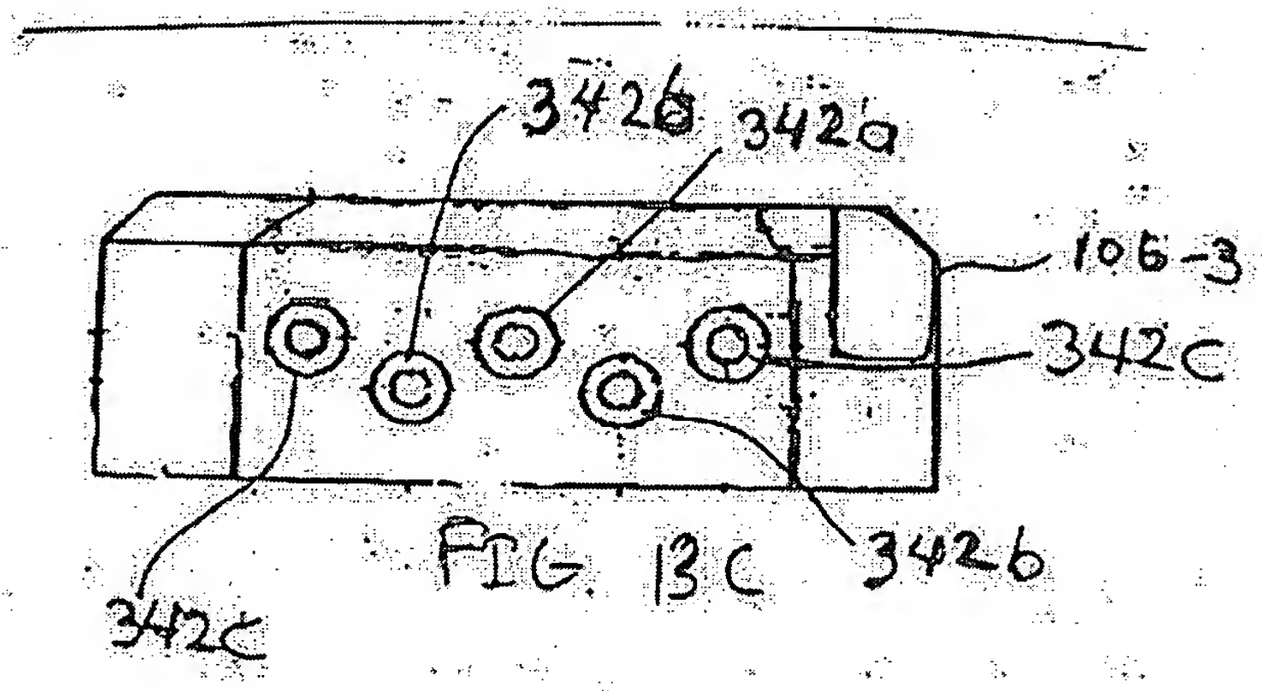

FIG. 13C

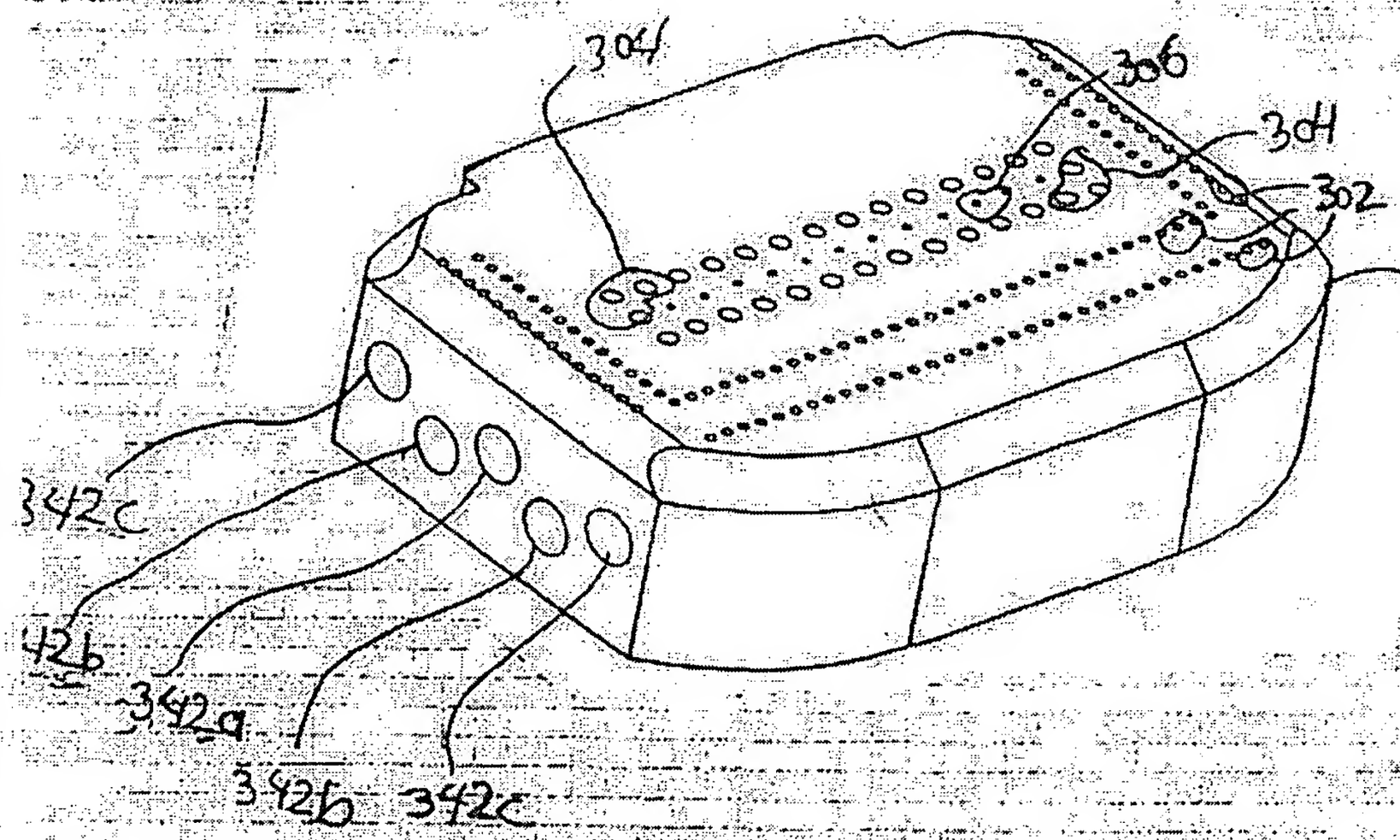

FIG. 14A

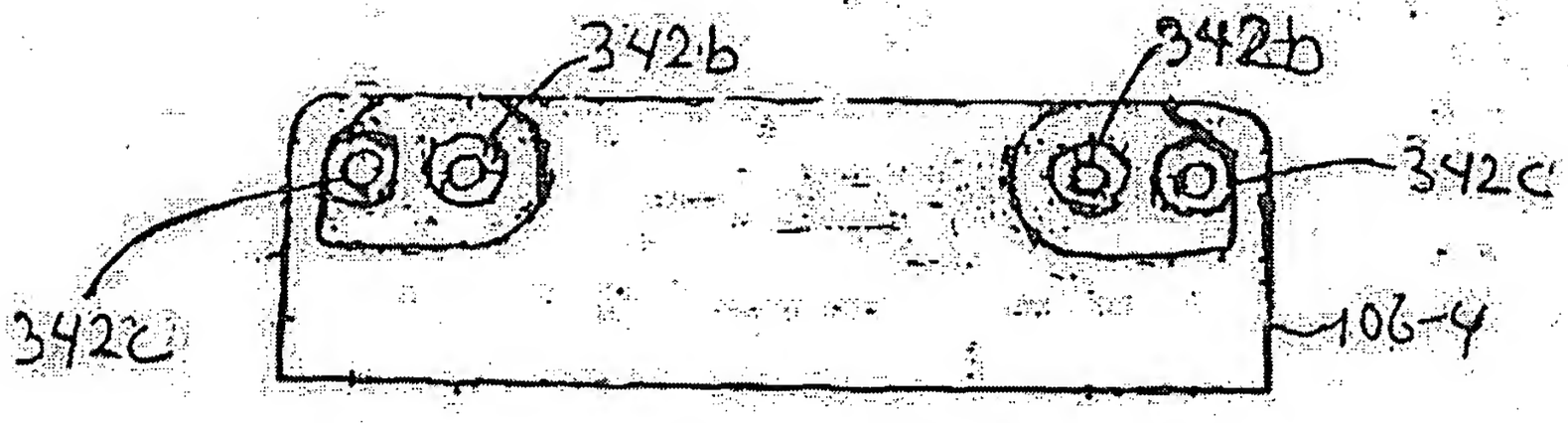

FIG. 14B

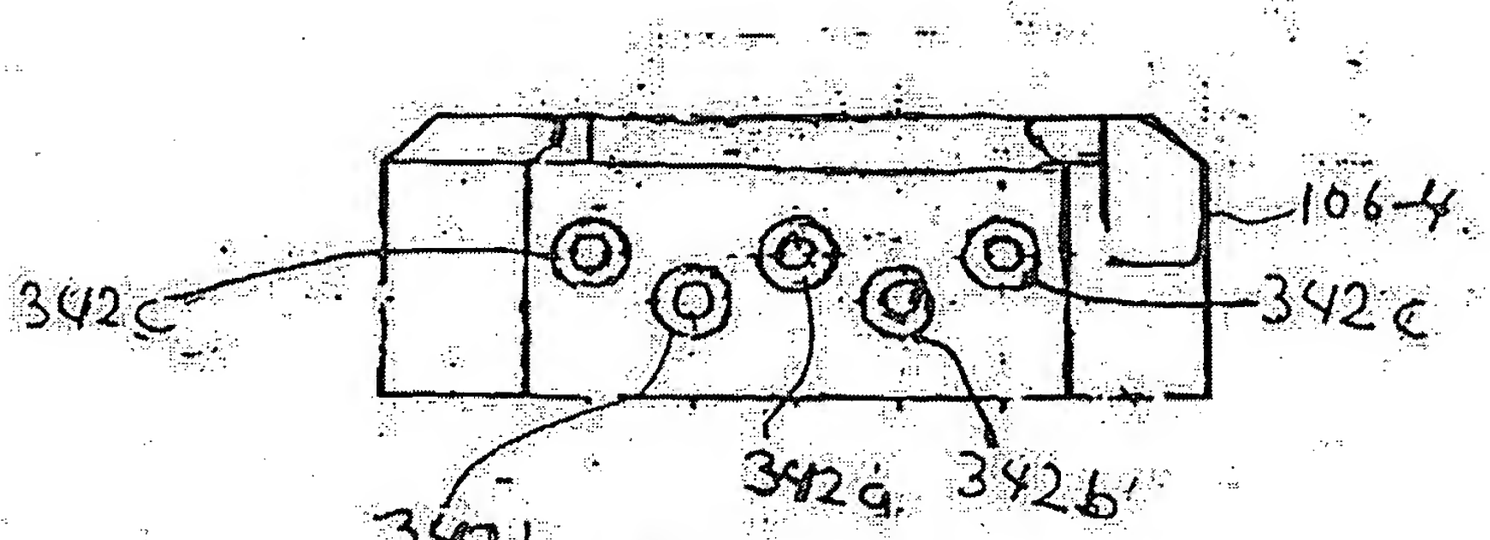

FIG. 14C

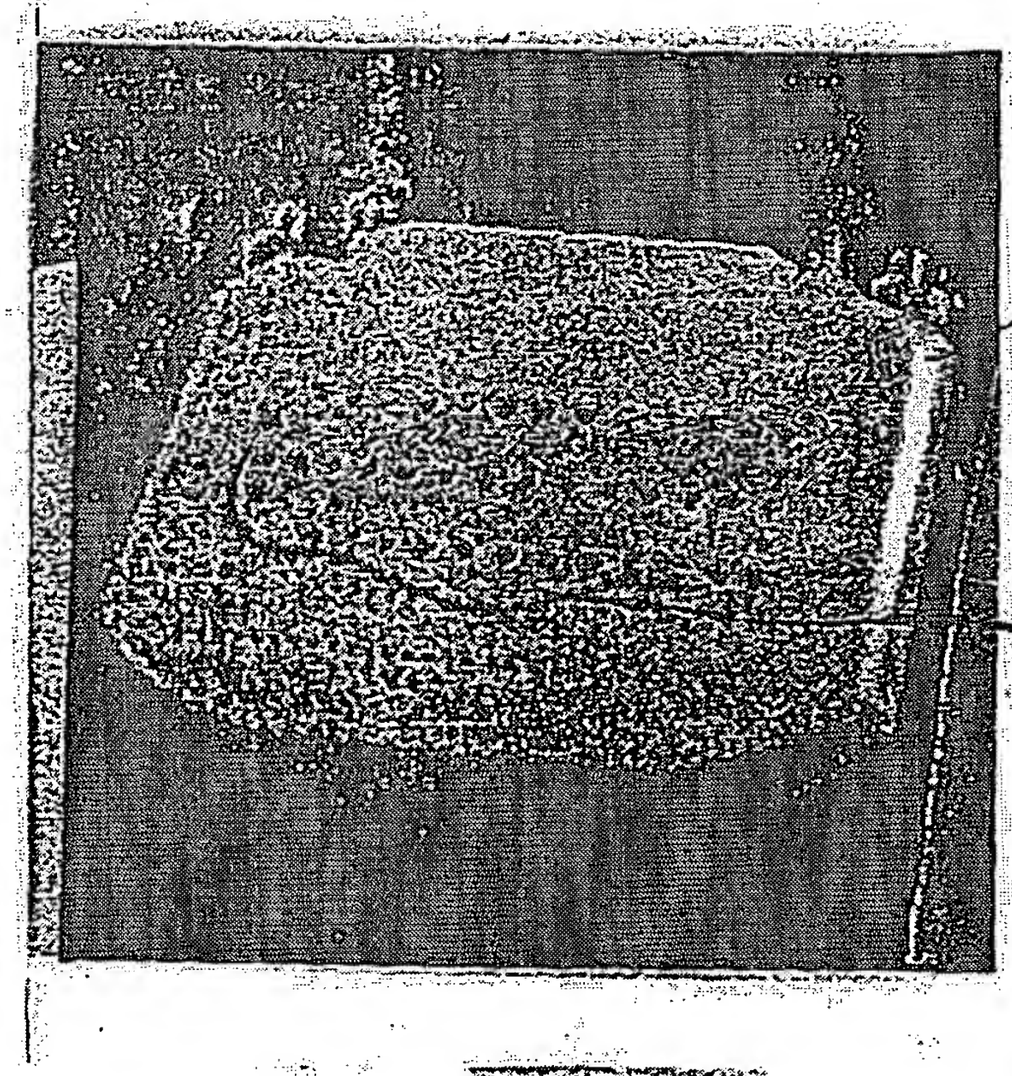

FIG. 15A

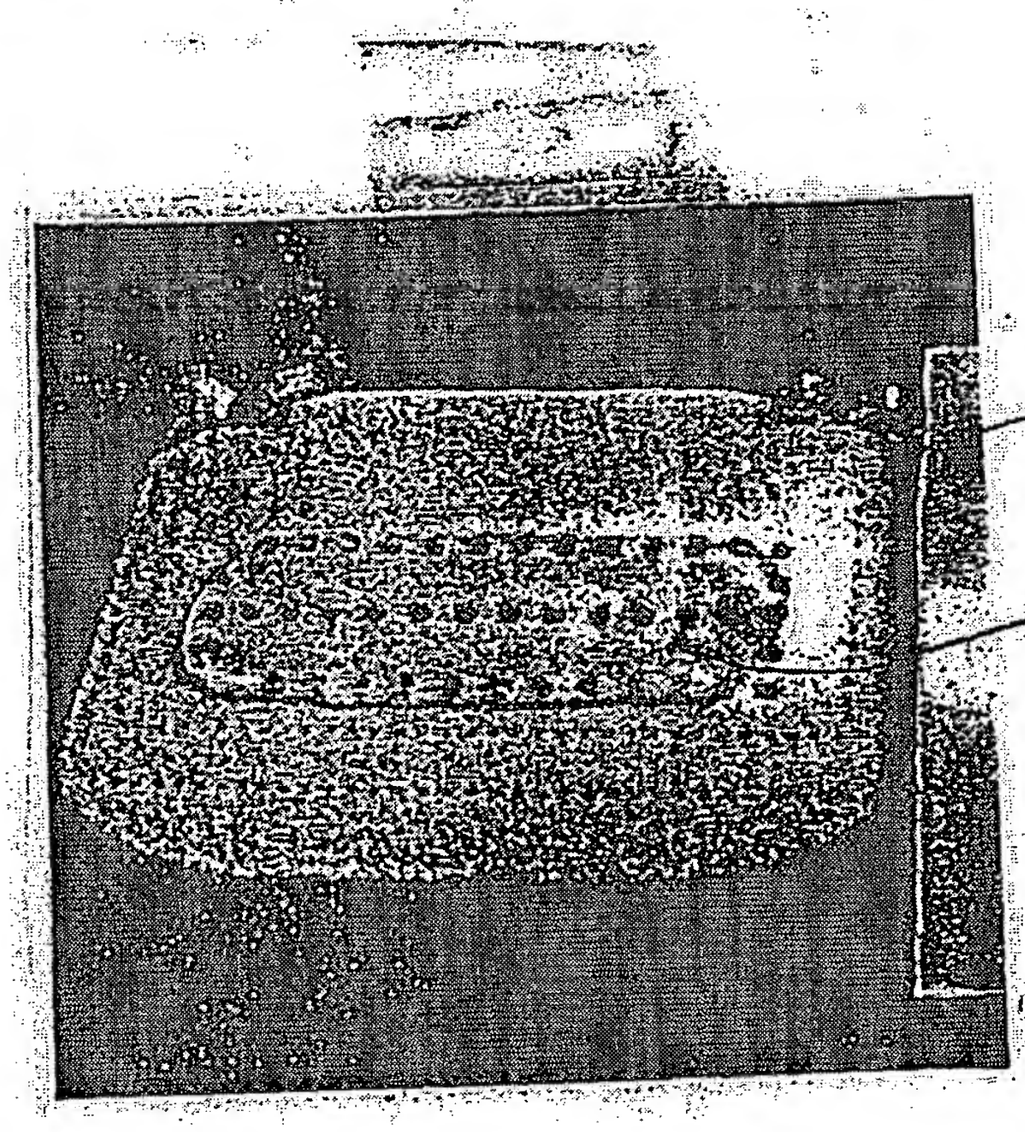

FIG. 15B

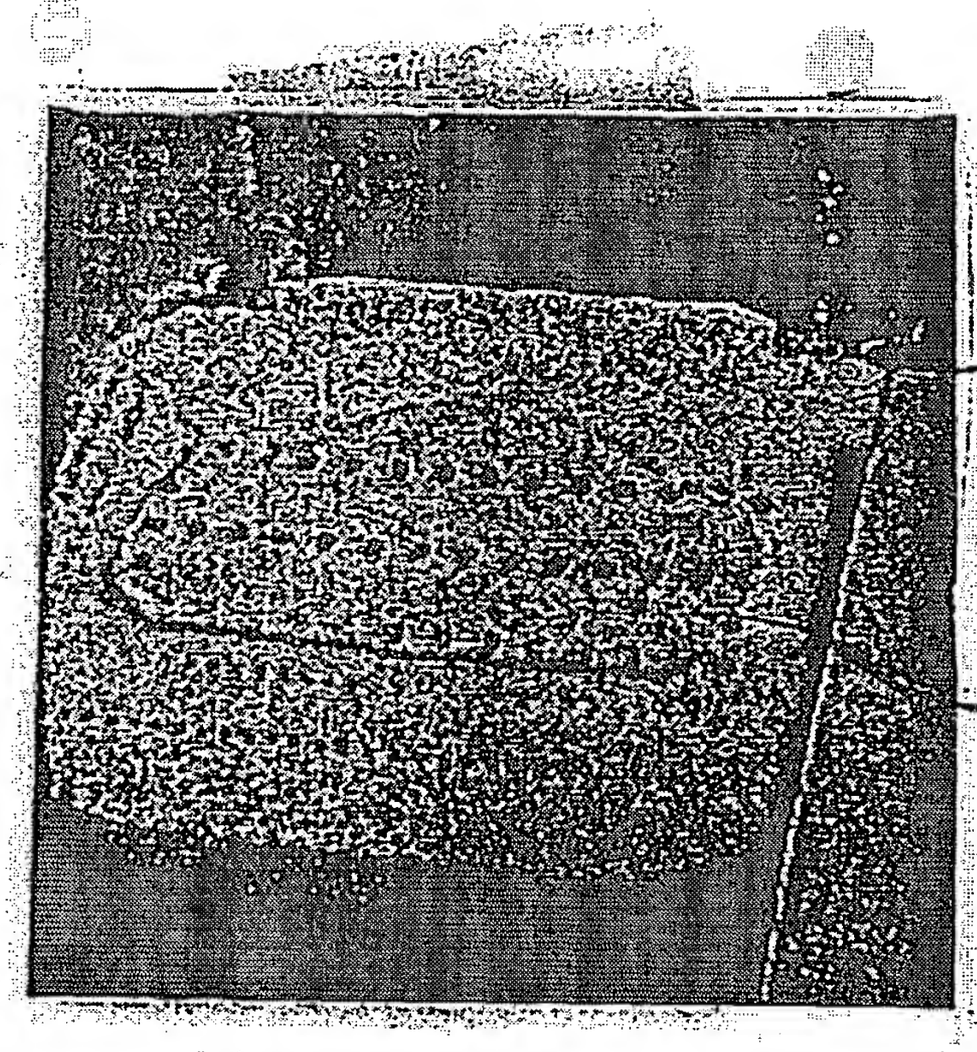

FIG. 15C

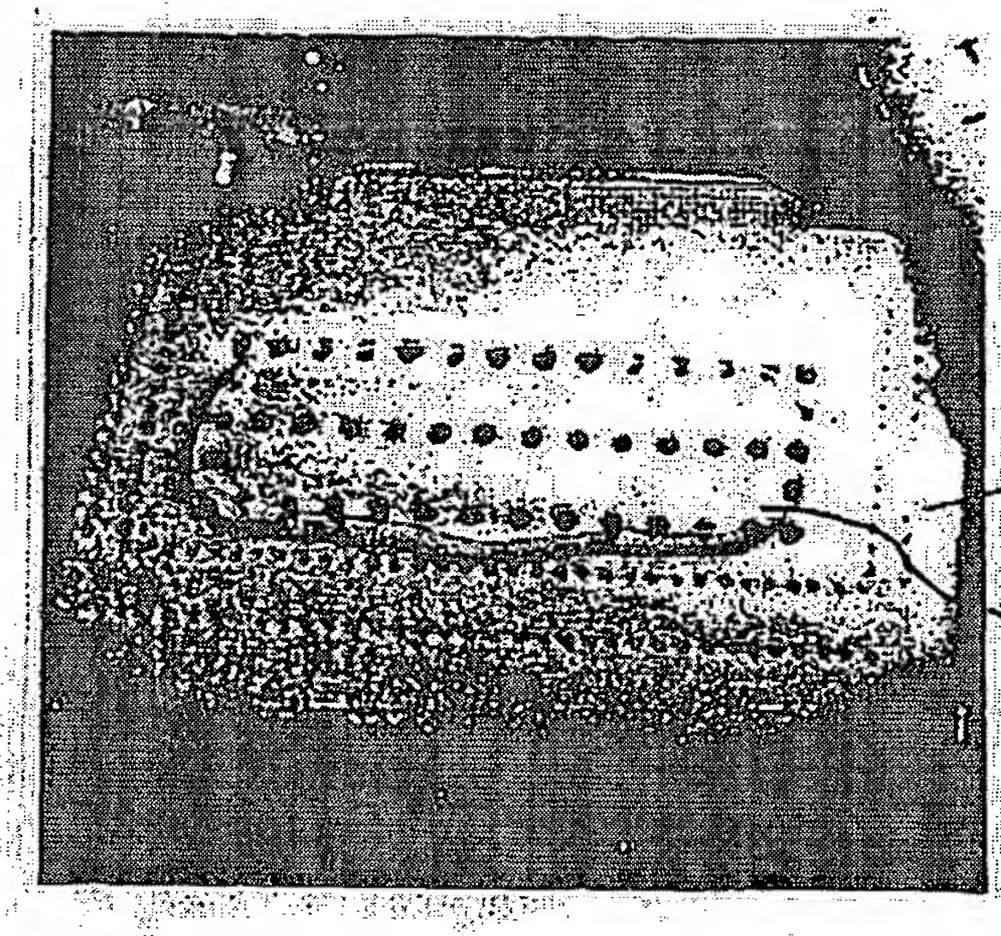

FIG. 15D

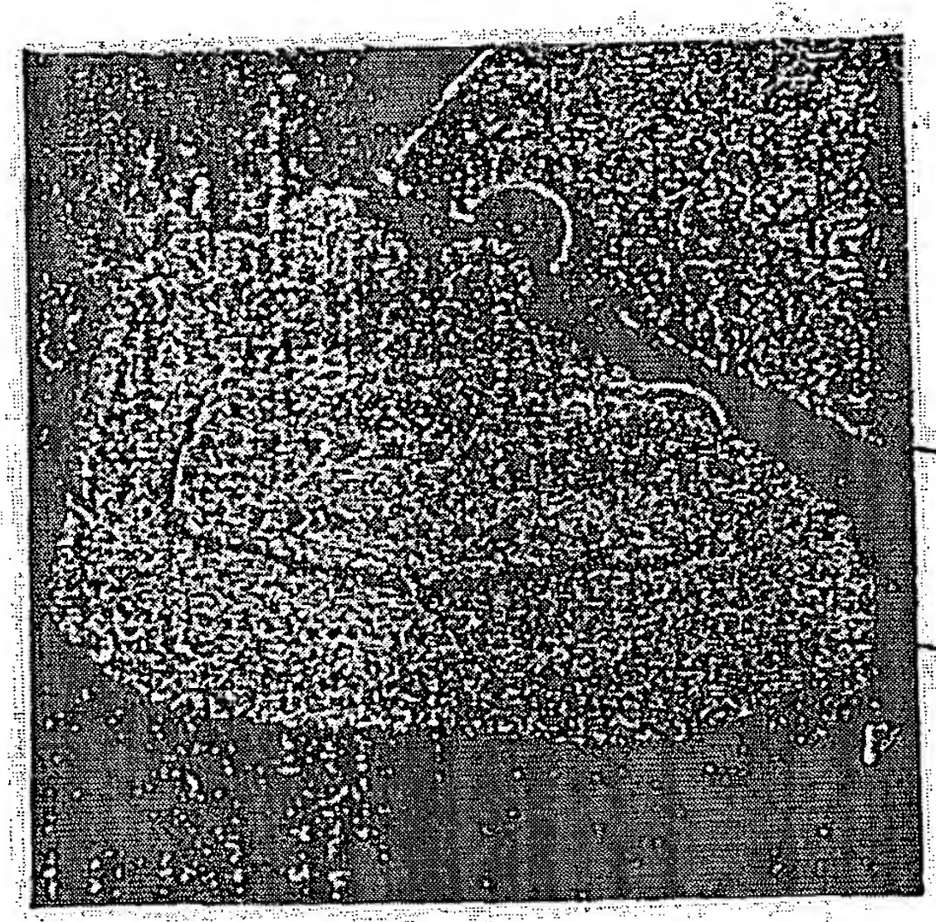

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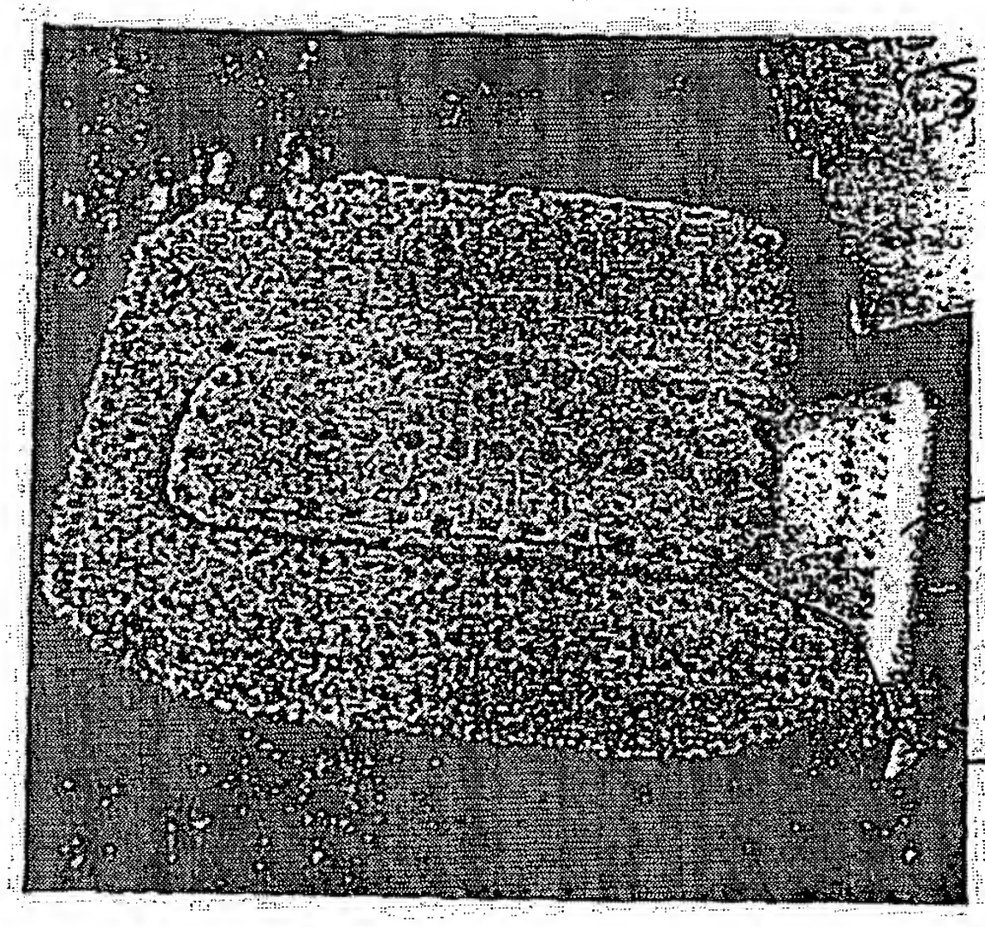
FIG. 15E

106



106

FIG 15F

116

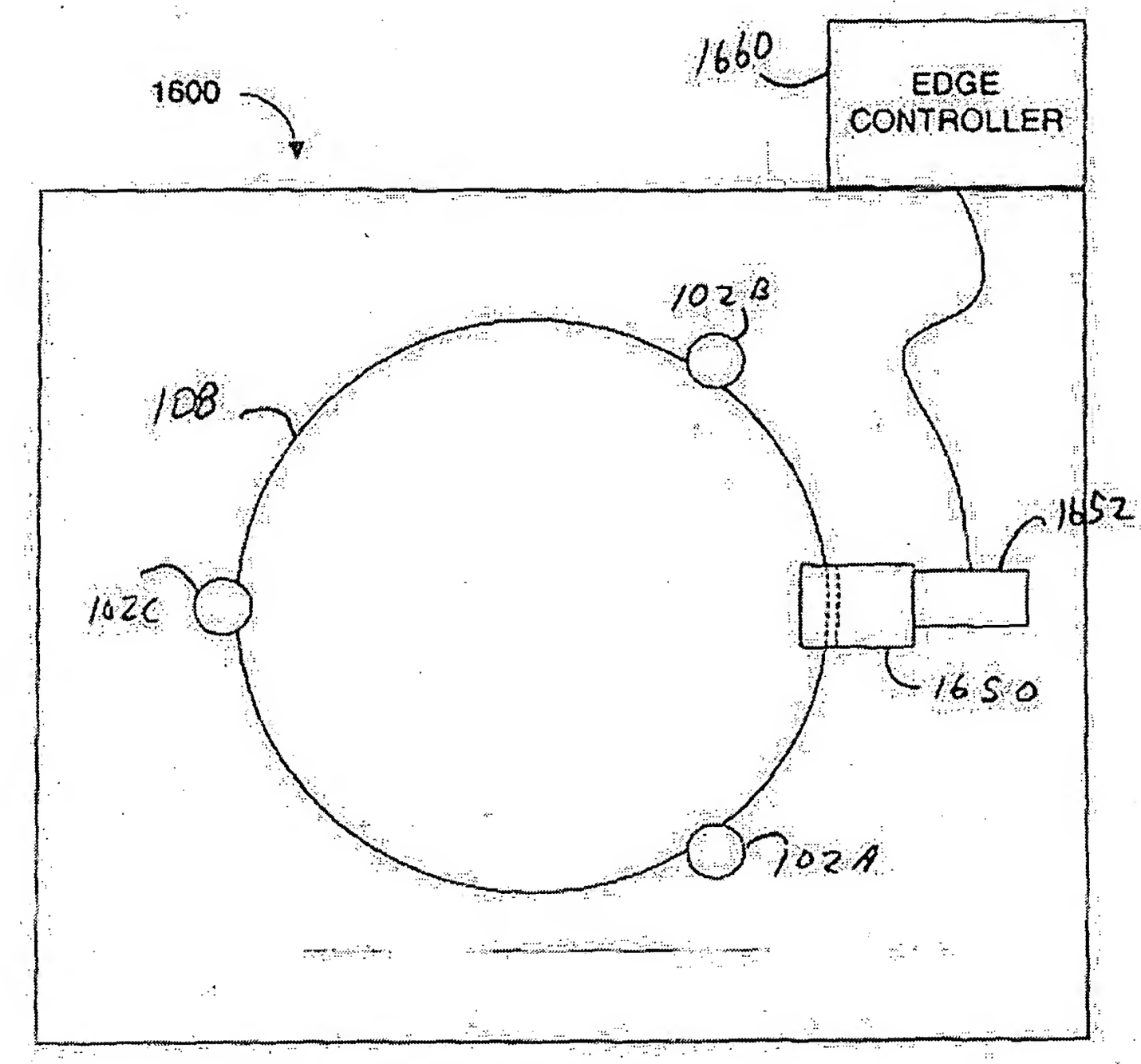


FIGURE 16A

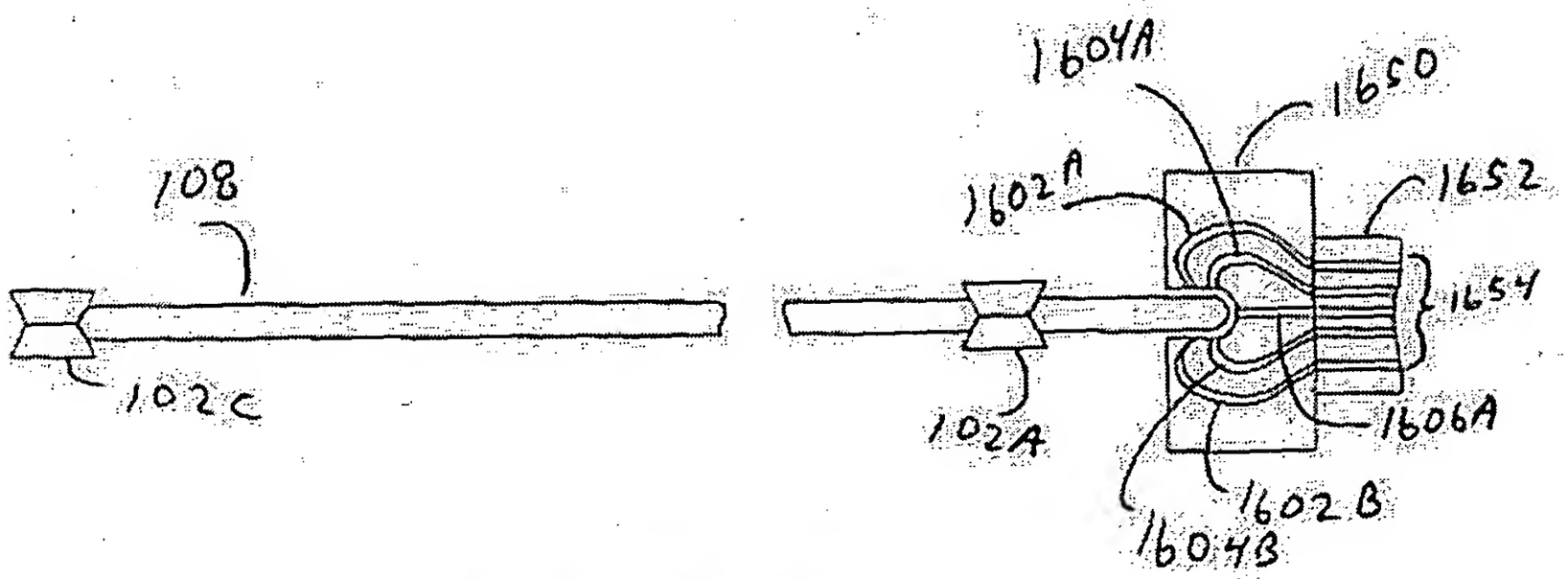


FIGURE 16B

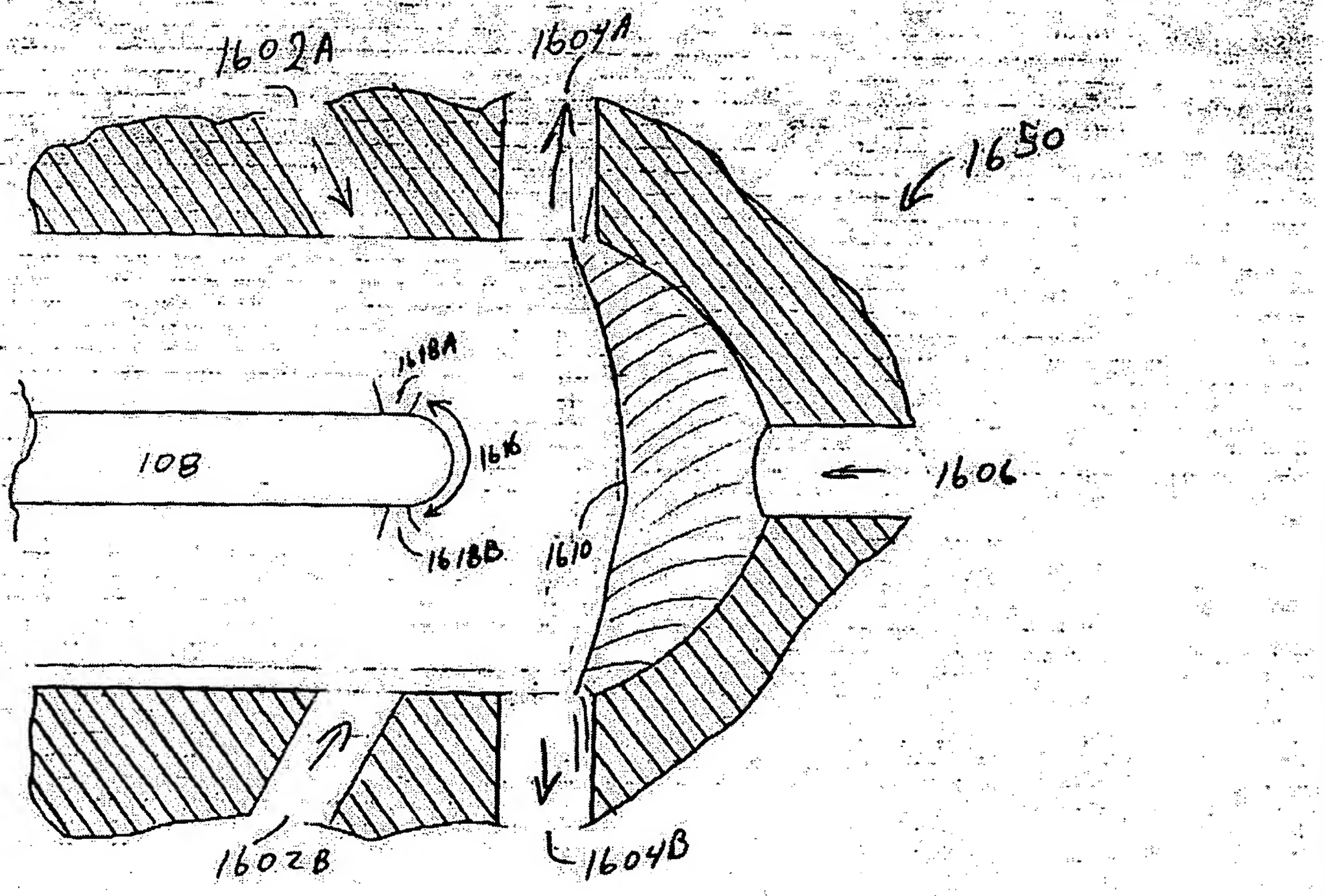


FIGURE 16C

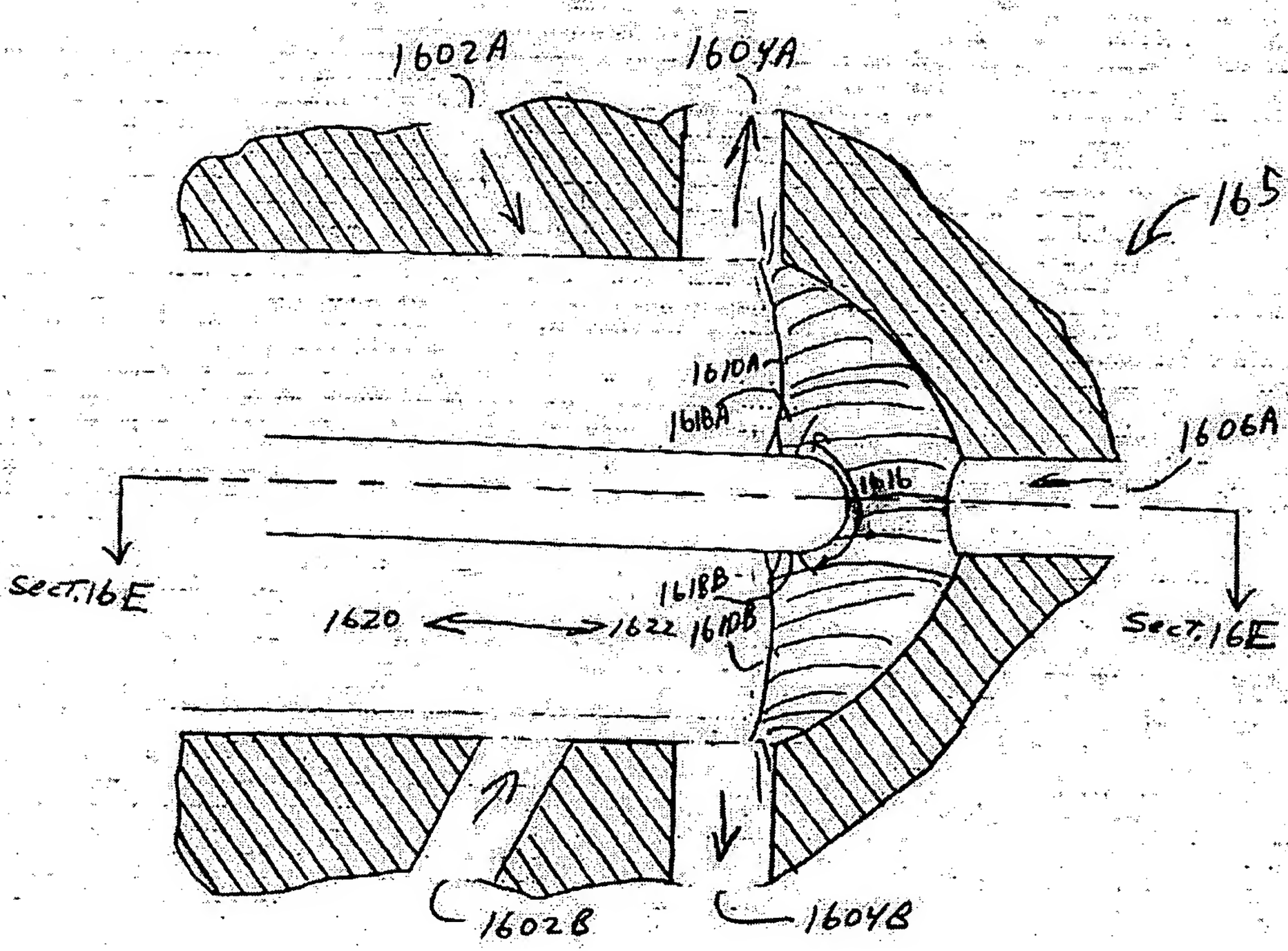
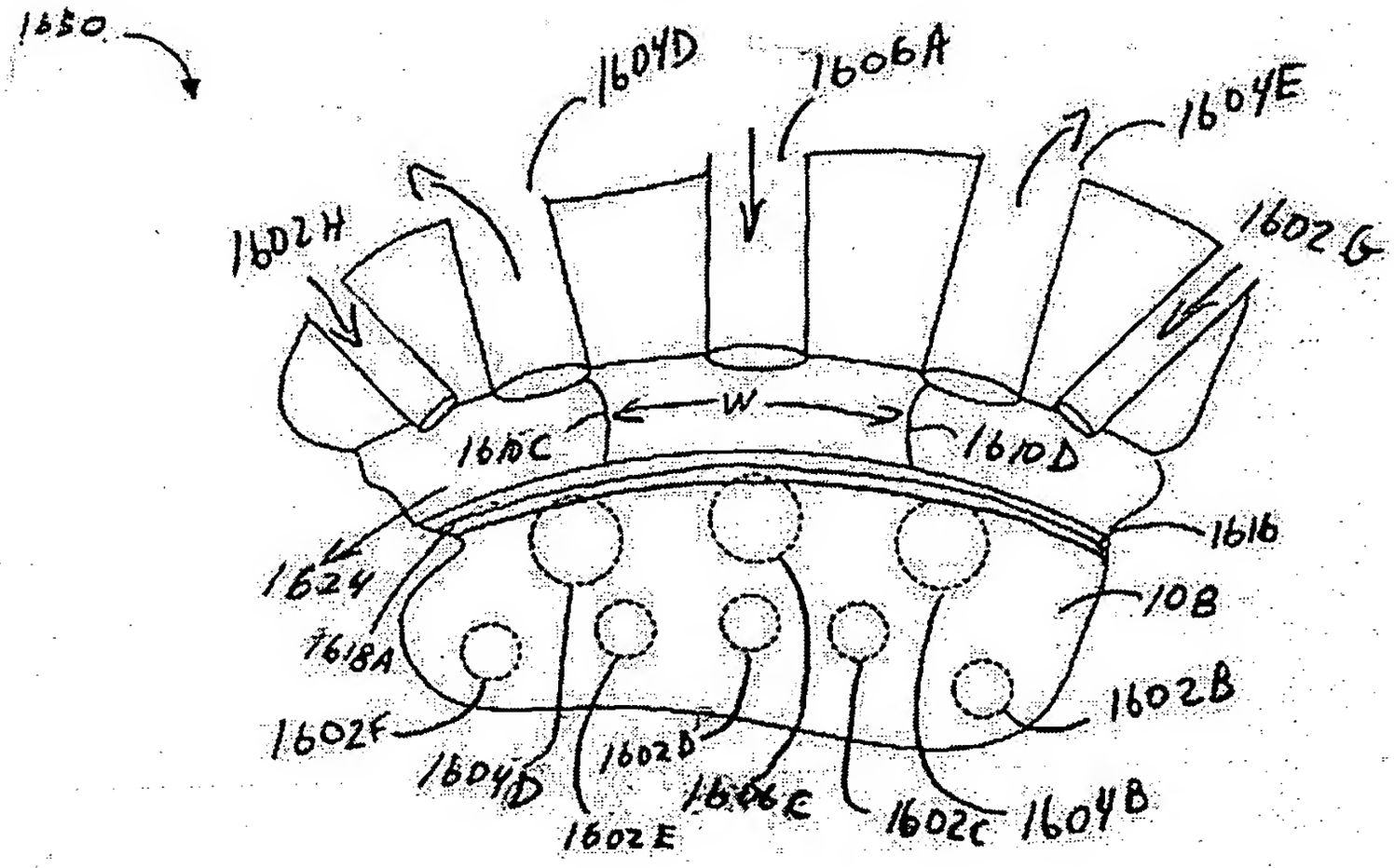

1602A
1604A
1650
1610A
1618A
1606A
1616
Sect. 16E
1618B
1620
1622
1610B
Sect. 16E
1602B
1604B

FIGURE 16D


1650
1604D
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1602H
1602G
W
1610C
1610D
1616
1624
10B
1618A
1602B
1602F
1604D
1602D
1606E
1602C
1604B
1602E

FIGURE 16E

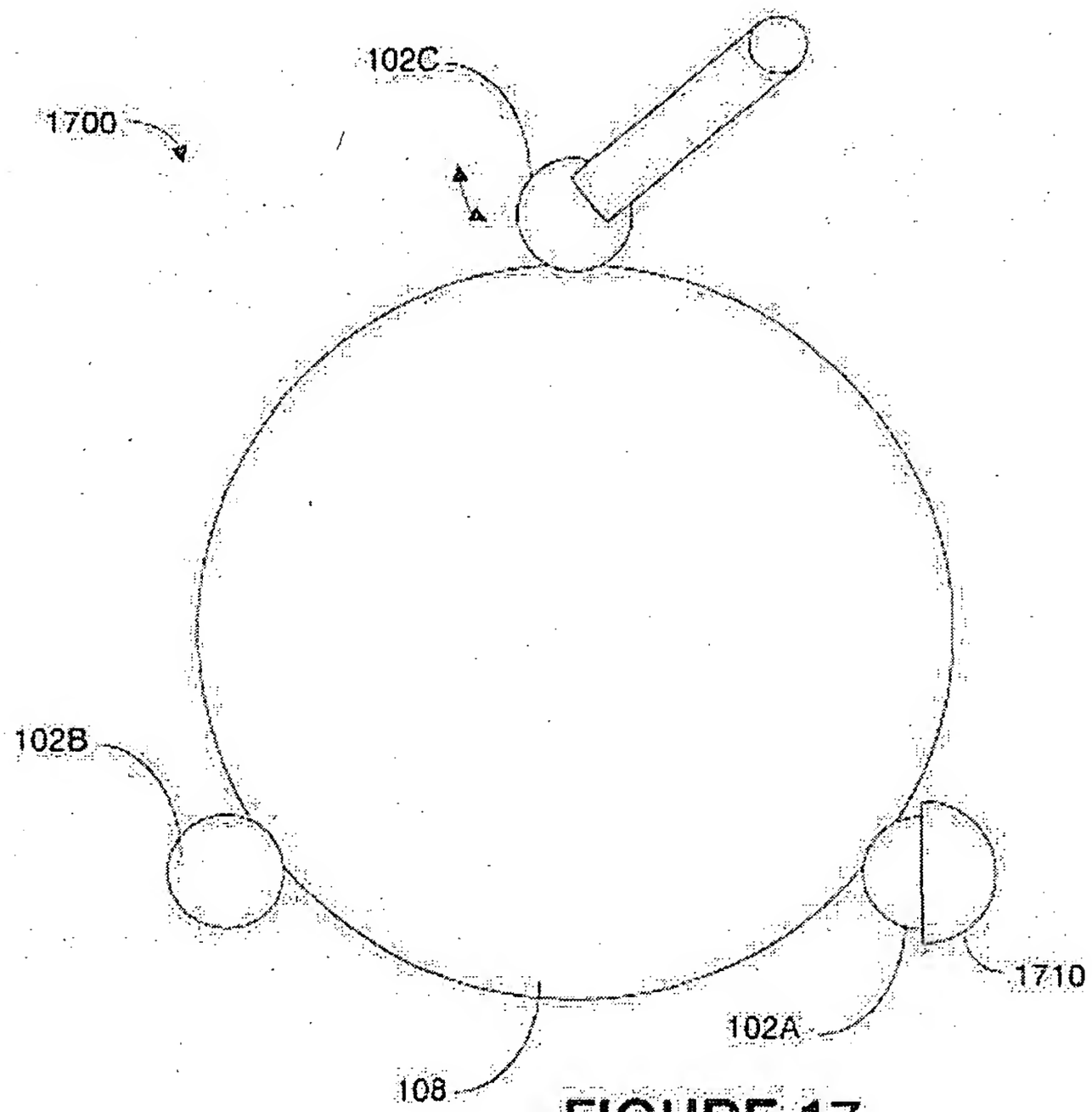

FIGURE 17

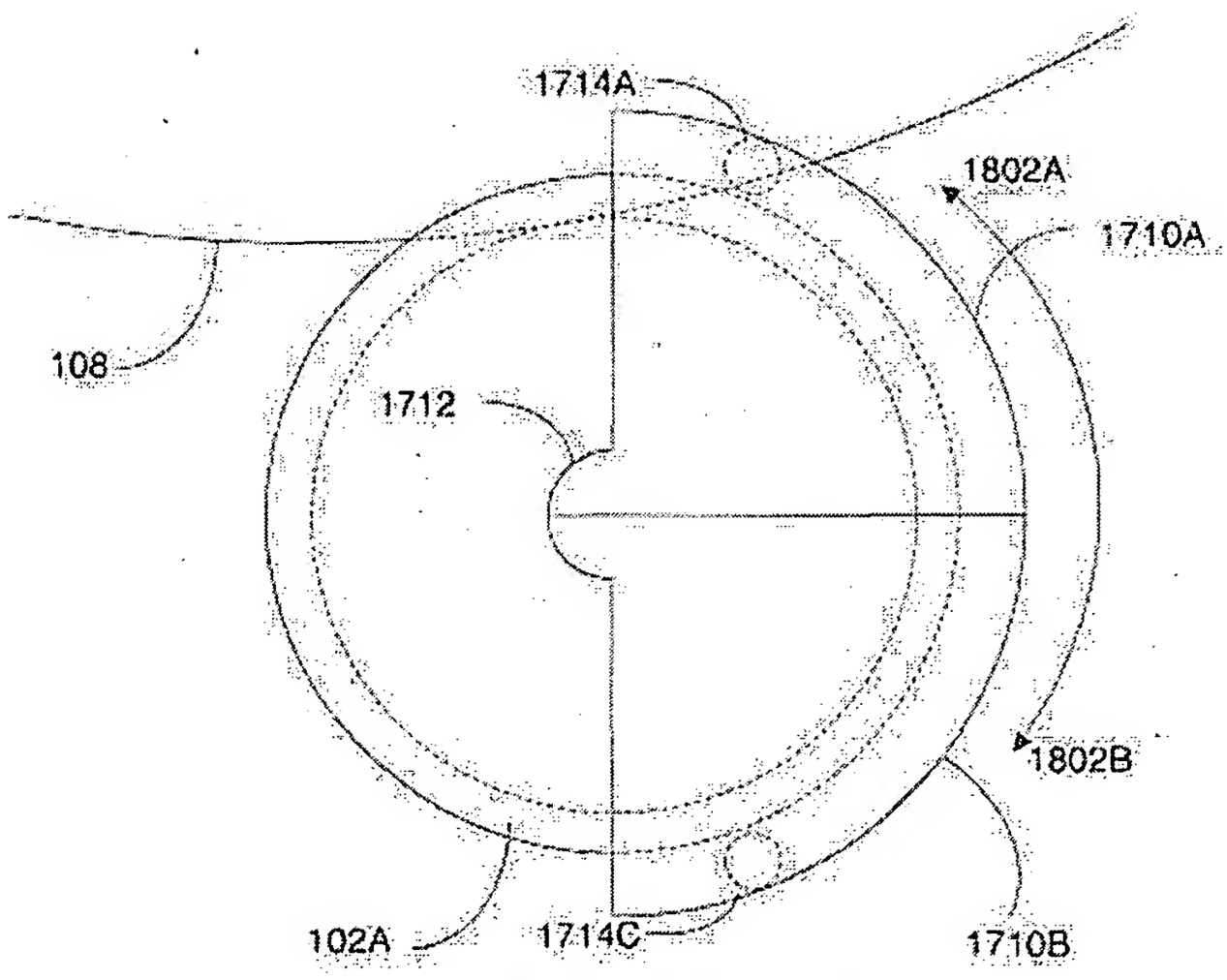

FIGURE 18A

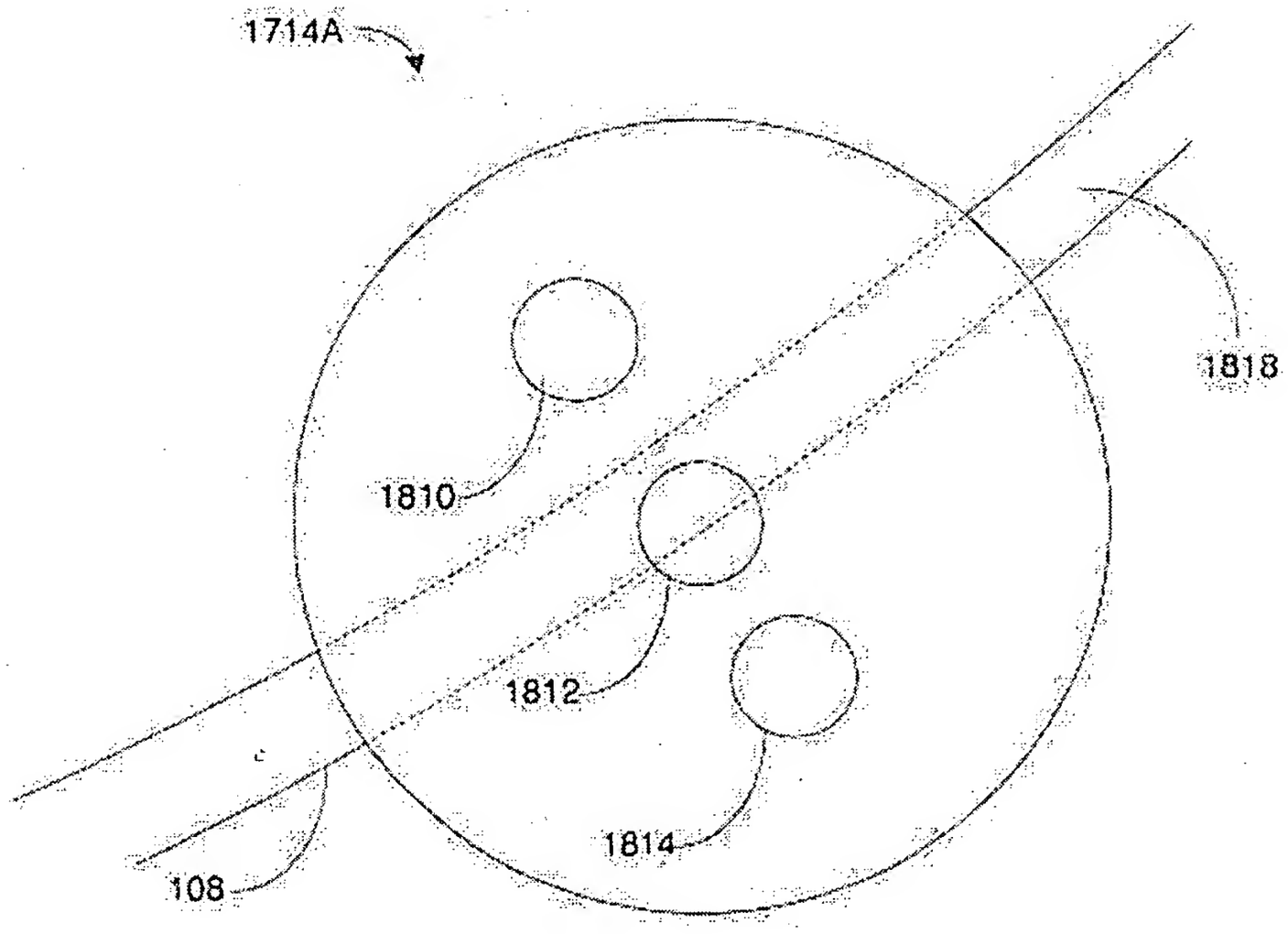

FIGURE 18B

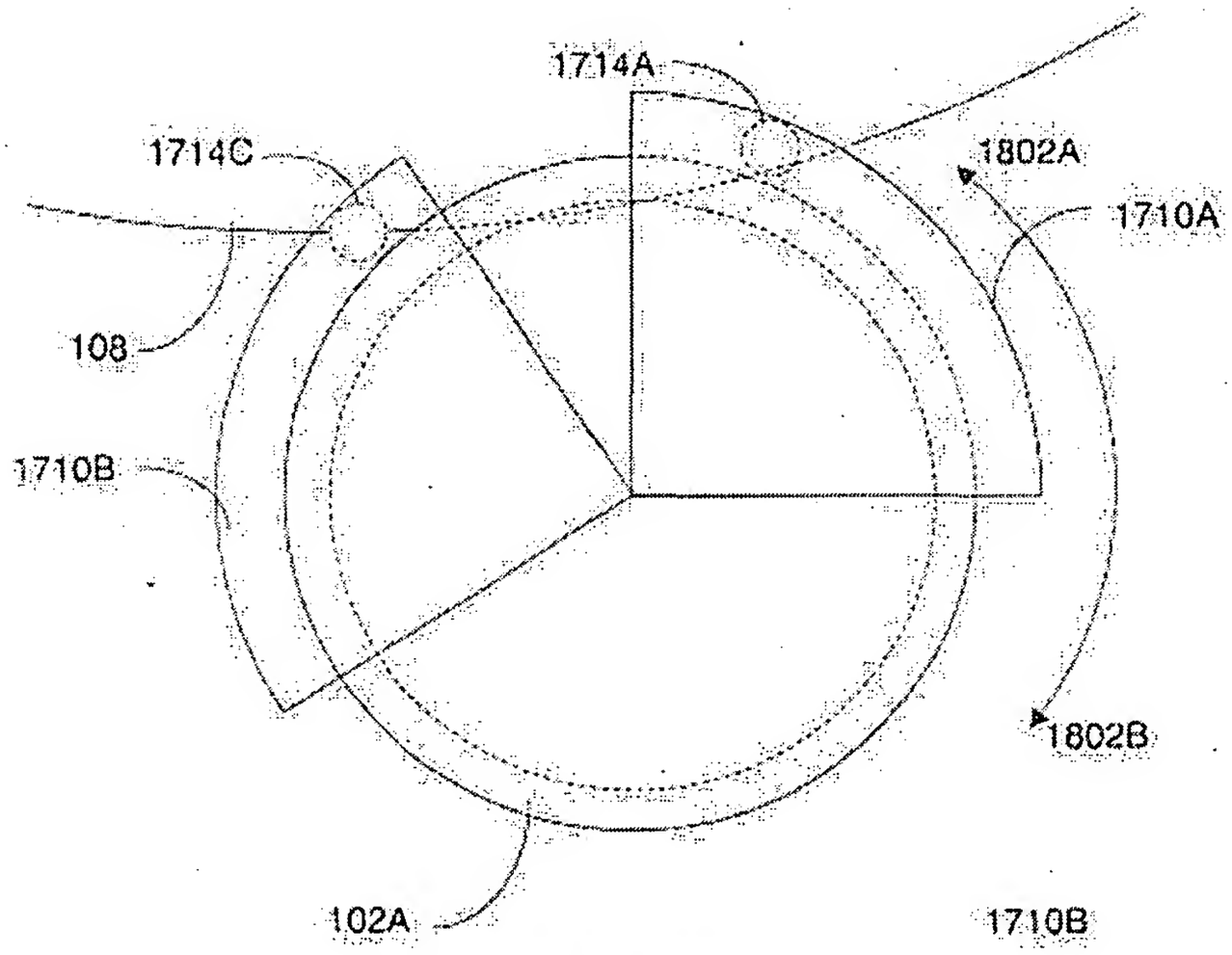

FIGURE 18C

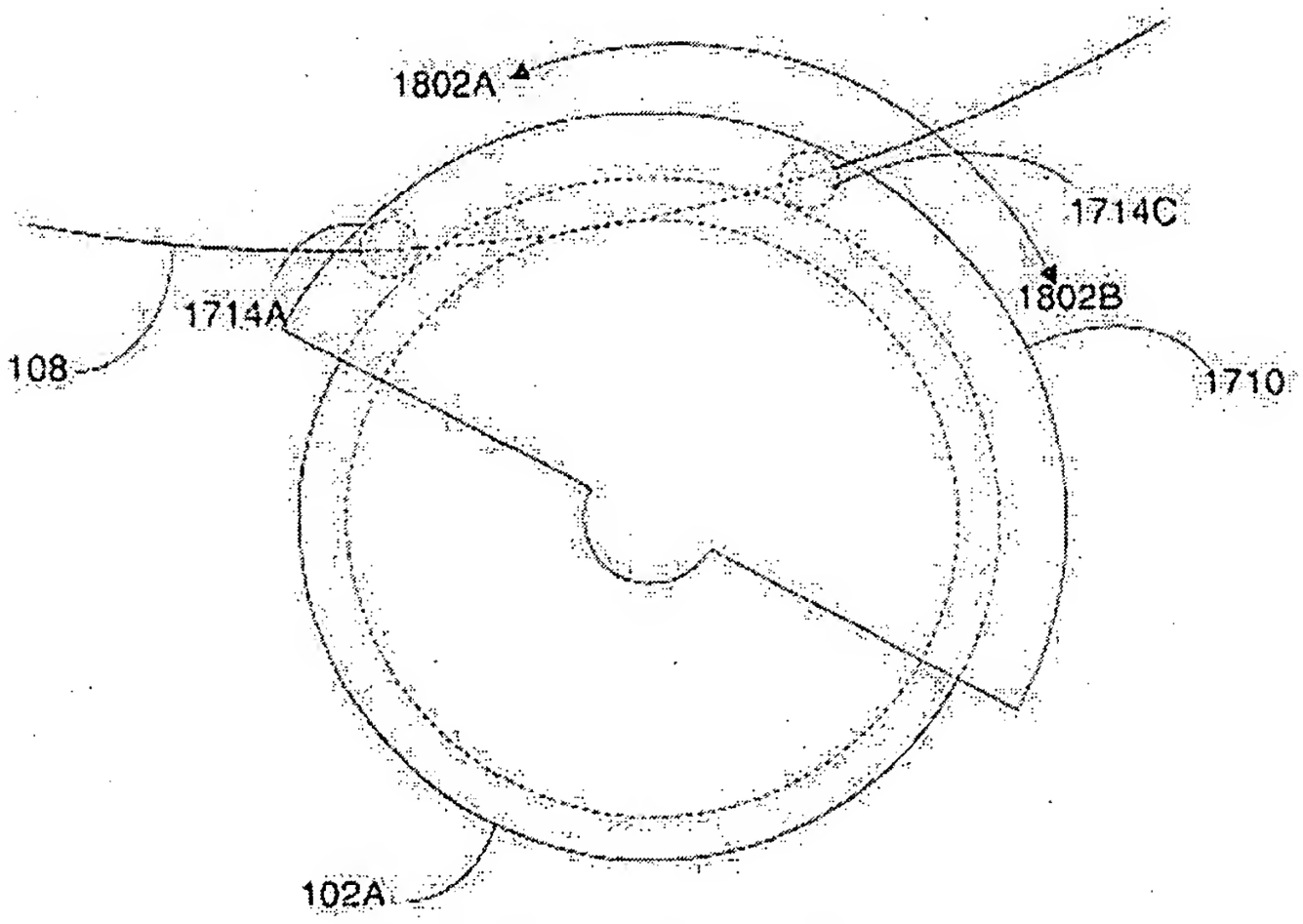

FIGURE 18D

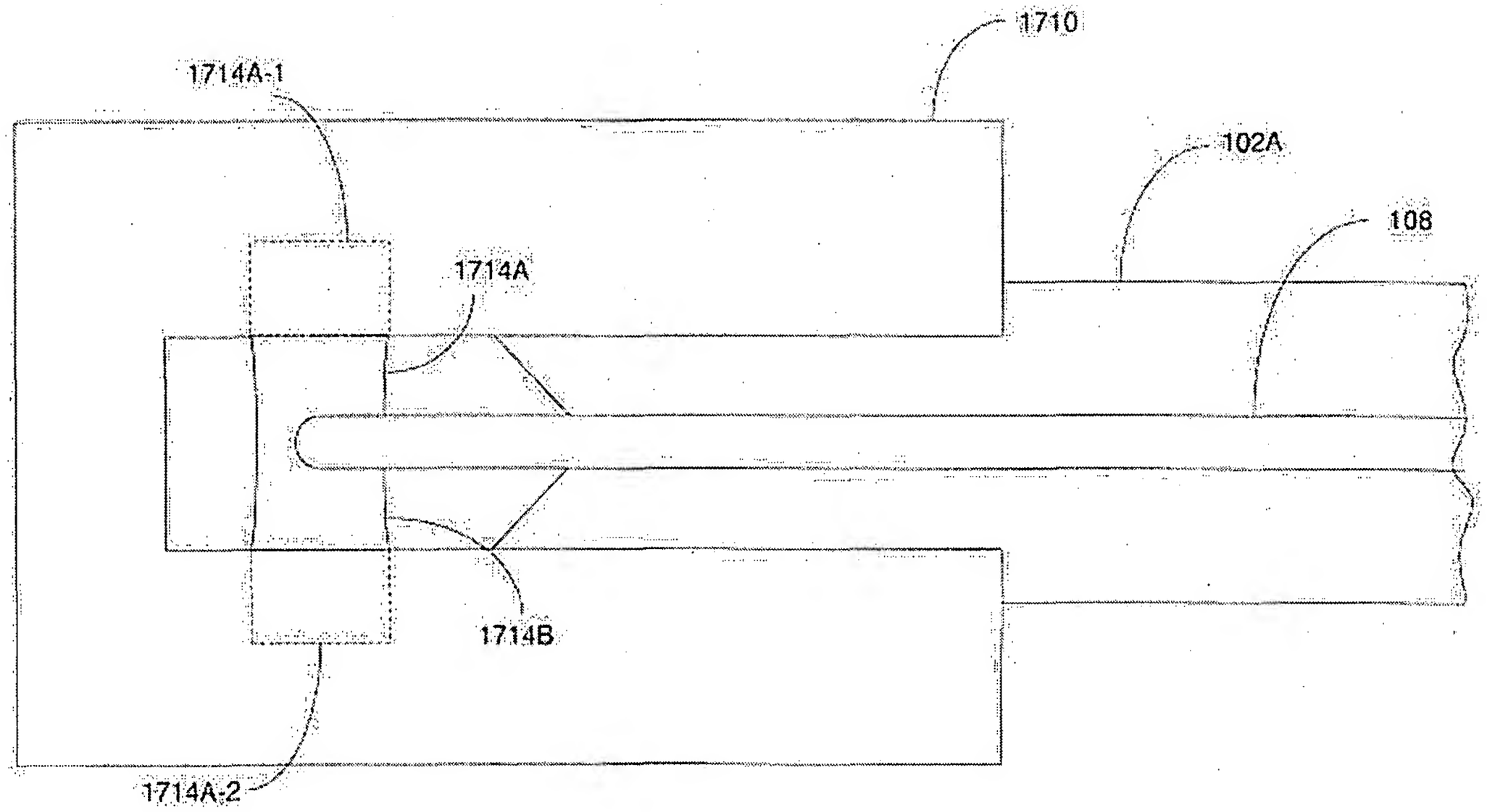

FIGURE 19A

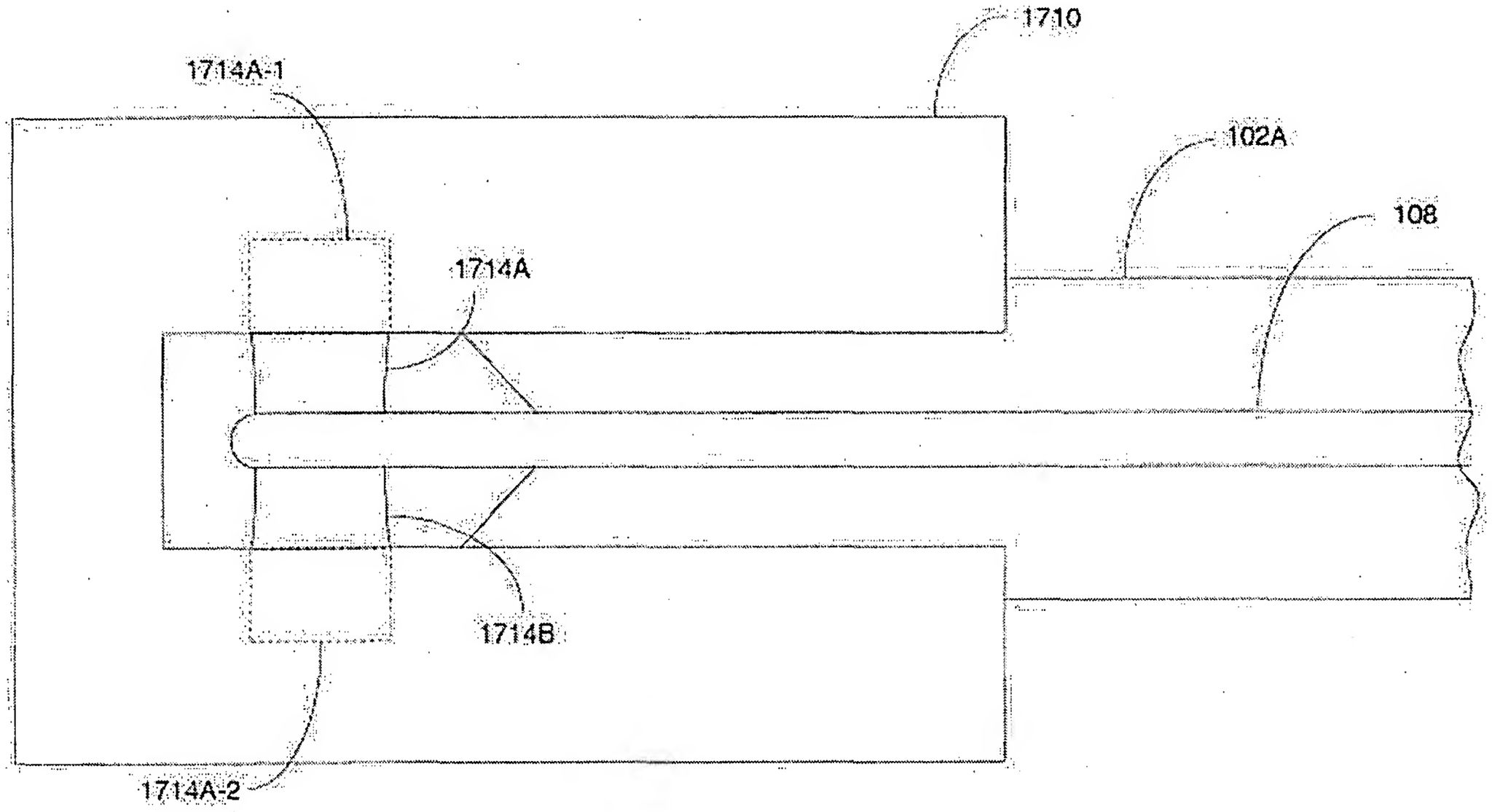

FIGURE 19B

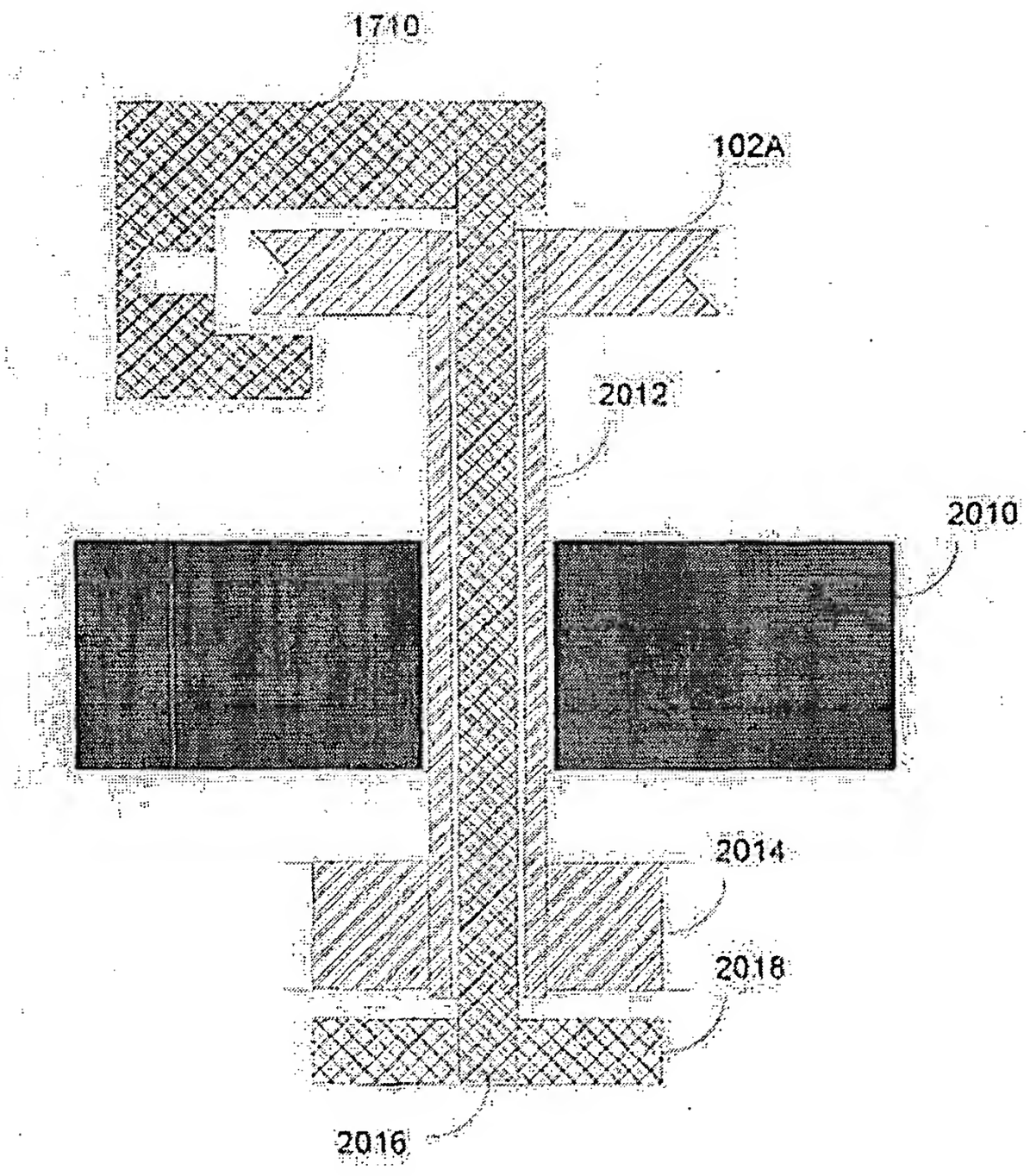

FIGURE 20